This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

No.....

BOSTON
MEDICAL LIBRARY
ASSOCIATION,
19 BOYLSTON PLACE.

THE

MEDICAL ANALECTIC

A

MONTHLY EPITOME OF PROGRESS IN ALL DIVISIONS
OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY

R. W. AMIDON, M.D.

BOSTON MEDICAL
MAR 26 1889
LIBRARY ASS'N.

VOL. V.

NEW YORK AND LONDON
G. P. PUTNAM'S SONS
The Knickerbocker Press
1888

CATALOGUED,
E. H. B.
3/26/89.

COPYRIGHT BY
G. P. PUTNAM'S SONS
1888

Press of
G. P. Putnam's Sons
New York

Pages 12. 17 -

The Medical Analectic

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE E. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Asst. Orthopedic Surgeon to St. Luke's Hospital and the New York Orthopedic Dispensary.

VOL. V., No. 1. January 1, 1888. WHOLE No. 49.

1264

BOSTON MEDICAL LIBRARY

MAR 26 1889

CONTENTS.

	PAGE
Leading Articles	1
Therapeutics	3
Medicine	6
Pathology	8
Orthopædic Surgery	9
Diseases of the Nose and Throat	10
Diseases of the Ear and Eye	11
Book Notices	

LEADING ARTICLES.

Starr (L.) on Croupous Pneumonia of the Apex Attended by a Unique Symptom.—The patient was a boy of four. The peculiar symptom in this case was the decubitus.

When first seen the little patient's condition was as follows: face drowsy in expression, a slight herpetic eruption on lips, and a bright circumscribed flush on the right cheek; decubitus right lateral, with the head markedly detracted, the neck stiff, the spine arched forward, the arms pressed close to the sides and folded across the chest, the thighs drawn up towards the abdomen, the legs flexed on the thighs and the feet crossed,—a decided *en chien de fusil* position in fact; tongue heavily coated, breath offensive, no vomiting, bowels active, and abdomen rather distended; respiration 40 per minute, with active nostrils, grunting expiration, and frequent hacking cough; pulse 140, regular and quick; skin dry; axillary temperature 104° F.; no *tache cérébrale* nor hyperæsthesia; urine scanty and heavy with lithates; cerebral activity blunted, but patient readily roused; well-marked physical signs of consolidation of the upper lobe of the right lung.

Jeaffreson (C. S.). Miner's Nystagmus.—This class of workers have a pecular set of pathological conditions, due, without doubt, to their peculiar surroundings, and still more to their cramped postion while working. Among these the neurosis named nystagmus is a very interesting one. This diseased condition varies widely in the severity and grouping of its symptoms. The lightest cases have the usual anæmic appearance of many of his class, and complains of inability to see clearly, or at all, in brilliant day or artificial blind. Examination showed both globes were torn from their connections and hanging loose in the conjunctival sac. The cornea had commenced to slough; the lids were retracted back of the eyeballs. The conjunctiva was swollen, thickened, infiltrated, so that it was difficult to distinguish the different tissues.

A few snips with the scissors of connecting conjunctiva was all that prevented the globes from removal. The muscles were all torn across, and the optic nerves ruptured seemingly close to the commissure. This self-enucleation had been accomplished by the patient forcing the thumbs into the external canthus back to the apex of the orbit.—*Am. Four. Ophthal.*, July, 1887.

Sullivan, (M. B.). Complete Dislocation of the Eyeball.—The patient slipping on a lemon-seed fell towards a stove on which was one of the usual iron cover-lifters in an upright position. He struck on this object just over the eyeball, and as it passed into the orbital cavity the globe popped out. When seen both eyelids were completely inverted behind the light, and equally badly in dim light. No globe. Applying a six-per-cent. solution of cocaine, I everted the lower lid and had it held by means of Charrière forceps by

Sweringen (H. V.) on Acute Mania Cured by Heroic Treatment. — The patient was a young Irishwoman who had six living children and had several abortions. About ten weeks after the birth of her last child she became maniacal. After four or five nights of sleeplessness and maniacal excitement, unaffected by ordinary hypnotics, the doctor gave her nearly a grain of morphine under the skin of the arm, and followed this by inhalations of chloroform. She slept until morning, when she awakened perfectly rational, took some nourishment and again went to sleep.

She thus slept and awakened for several days and nights, occasionally talking "a little off," as her husband expressed it; but on the whole constantly improving, although she remained very weak.

It has been the author's experience in these cases that *small* doses only aggravate the condition, and a tolerance for very large doses is established by the very nature of the case.—*Med. and Surg. Reporter*, July 16, 1887.

Penn (J. W.) on the Prevention of Consumption.—The subject was a man, at the time my observations of his case were made, of about thirty-five years of age. His mother and two sisters had died of pulmonary tuberculosis. His case came under my care early in the fall of 1884, and was continued through the fall and winter of 1884–5. About ten years before, he contracted an acute attack of gonorrhœa, resulting in stricture of the urethra and followed by a chronic gleet, which had given him a great deal of trouble. The chronic inflammation had gradually extended by continuity until it invaded the marked contrast is presented between the course of the disease in this family and that in the Wetherbee family in Western Massachusetts, reported by Dr. W. A. Hammond. In the latter the disease did not appear until the subjects were well advanced in adult life, when its progress was comparatively rapid, ending fatally in a few years.

These cases are very useful as showing the fact that progressive muscular atrophy of *hereditary* origin is not necessarily a fatal malady; that it may pursue an extremely chronic course; that, so far as general health and longevity are concerned, it may be innocuous; and finally, that, after advancing to a certain point, it may lose essentially its *progressive* character.

I feel that I should be betraying a confidence were I to publish the names of these people in full. I therefore represent the family name of their common ancestry as follows: P******. Should cases springing from this same source be observed by others, I think that the name would be readily recognized. The people who have formed the subject of this paper are inhabitants of Eastern Massachusetts. The collateral branches are numerous, and are found in every part of the country.

Fuller (S. E.) on the Picrate of Ammonia in Malarial Fevers.—Having been for many years a sufferer from chronic malaria, and being at the time afflicted with an unusually severe attack, for which I had taken the usual remedies without receiving any benefit, I at once procured some picrate of ammonia, and began its use in half-grain doses (made into a pill with extract of gentian) three times a day. In three days' time there was marked improvement in all my symptoms. Had no more chills, pain in the head and back had left me, and I awoke in the morning without those terribly exhausted and irritable feelings which those who suffer from this disease so well know. This result encouraged me to make trial of the drug in several cases of similar trouble in which I had been using quinine, etc. I prescribed it for six adults, of both sexes, and kept watch of the effect. In all but one case the same marked improvement speedily resulted. I now began to notice a peculiar, deep-orange color in my urine, without any change in quantity, and a chemical analysis of it showed that except for the change in color it was normal. Upon inquiry I found that the urine of all the patients was of this same orange color. Having taken the medicine myself in doses as above mentioned for ten days, I decided to stop its use and watch for the disappearance of this color from the urine. To-day, May 24th, seven days since stopping the medicine, there is not the least improvement in the color of my urine, and the whites of my eyes, and the skin of my face generally, are the color of one mildly jaundiced. The same thing has occurred to all my patients who have taken the remedy for a week. One lady, to whom I gave the maximum dose, one and a half grains three times a day for eight days, is now deeply jaundiced, the color involving not only the whites of the eyes and the skin of her face, but also the skin of her neck and breast, from which,

shading to a lighter color, it covers the rest of her body. In each case the tongue is clean, bowels not affected, and appetite good.—*Letter to Med. Record*, July 2, 1887. result from an enema of the smoke of tobacco.—*Med. and Surg. Reporter*, Sept. 3, 1887.

THERAPEUTICS.

Young (J. K.,) on Recovery from the Toxic Effects of a Tobacco Enema.—The infusion was prepared from a pipeful of tobacco, in a pipe which had been in continuous use for four years, and consequently saturated with nicotine. Of this, about two fluid ounces were introduced into the rectum of a child four years old for the destruction of seat worms. Vomiting and tenesmus ensued almost immediately, a portion of the enema was ejected, and severe convulsions followed. When seen, scarcely ten minutes after the administration of the drug, the patient was in a severe general convulsion ; respiration oppressed, pulse rapid, and pupils dilated.

The prompt administration of soap enemata, external rubefacients (repeated hot baths, sinapisms, etc.), with alcohol freely internally, were followed by a rapid improvement of all the symptoms, and recovery followed.—*Med. and Surg. Reporter*, Aug. 13, 1887.

Hue (F.) and Bruère (G.) on the Treatment of Pulmonary Tuberculosis by Inhalation of a Vapor of a Boiling Solution of Picric Acid in Water.—Attention was turned to this subject by the apparent recovery of a tubercular patient who worked in the fumes of picric acid.

Some of the drawbacks to its use are as follows: It corrodes metals and must be stored in wooden or eathenware vessels ; it imparts a yellow tinge to the skin, necessitating a free use of soap and water after each inhalation, and it explodes when thrown into the fire. The taste of the acid is bitter, but that seems sometimes not to be a disadvantage by increasing the appetite. In some cases it produces vomiting. How much of its action is due to its febrifuge power it is hard to say.

Four cases were treated in this way with what the authors consider very flattering results.—*Gaz. Hebd.*, etc., May 13, 1887.

Holtzapple (G. E.) on Oxygen Gas and Nux Vomica in the Treatment of Pneumonia.—The author in combating the respiratory failure and asphyxia of pneumonia, concludes that strychnia best fills the former, oxygen the latter indication.

In cases of emergency he generates the oxygen by heating some binoxide of manganese and chlorate of potash in a large tube, conveys it by a rubber tube into a receptacle containing water, from which, as it bubbles, it is fanned into the face of the patient. He suggests the possible utility of oxygen in bad cases of whooping-cough.—*N. Y. Med. Jour.*, Sept. 3, 1887.

Payne (R. L.) on Mistletoe: its Physiological Action and Therapeutic Applications.—In the year 1851, Dr. Turnipseed, of South Carolina,, called attention to the ecbolic action of a decoction of mistletoe. But little attention was paid to the declaration. In the year 1878, renewed interest in the remedy was excited by an article written by Dr. Long (*Louisville Medical News*), in which the author speaks highly of the exytocic virtues of mistletoe, claiming it to be far superior to ergot :

1st. Because it acts with more certainty and promptness.

2d. That instead of producing a continuous or tonic contraction, as does ergot, it stimulates the uterus to contractions that are natural, with regular intervals of rest. Consequently, it can be used in any stage of labor, and in primiparæ where ergot is inadmissible.

3d. It can always be procured fresh, does not deteriorate by keeping, and is easily prepared.

Cases have also been reported by European authorities, in which children, after eating of the berries, were seized with vomiting, great thirst, tenesmus, bloody and mucous stools, and in one instance collapse and death. Further than the gastro-enteric irritation which the symptoms in these cases indicate, nothing was published throwing any light upon the physiological action of mistletoe until in the *North Carolina Medical Journal* (May, 1881), the writer published an extended series of experiments upon cold- and warm-blooded animals, from the results of which the following general summary of the physiological action of the drug was deduced, viz. :

Mistletoe is an irritant of the gastro-intestinal mucous membrane. We also

Brunschwig on Hypopyon and Dental Caries. — It is a well-known fact that there is some connection between the eye and the teeth. Their nerve supply is through the same channel, the trigeminal. Two cases of hypopyon may show this more clearly. 1st. A lady, sixty-six years of age, consulted us for an inflammation of the left eye which had commenced six weeks before. This eye had been useless since infancy, yet had never given trouble. It was atrophied, its tension minus, the cornea was pearly, and there was an hypopyon, no photophobia, and almost no pain. We prescribed atropine, hot compresses, leeches to the temple, and calomel internally. The atropine and the hot compresses were continued two weeks without giving much relief. We examined her mouth, and found on the left side, in the superior maxilla, three roots painful on pressure. We advised their removal the same day; and the next day were surprised to note a complete disappearance of the hypopyon and a marked diminution in the pericorneal injection. The pearly appearance of the cornea also completely disappeared. Another case is that of a merchant suffering from acute iritis, with numerous posterior synechiæ. No history of rheumatism or syphilis. He was ordered to use every ten minutes for an hour a 1 % solution of atropine and a 2 % solution of cocaine,—after one hour to use two drops every hour; repeated applications of hot compresses, neapolitan belladonna ointment over the forehead and temple, six leeches in front of the right ear, and internally seven grains of quinine. The next day marked diminution of pain; only one of the synechiæ remain. This yields during the day. In two weeks the patient is discharged as cured. In two days he returns with fresh inflammation, and in addition a large hypopyon. He does not admit any imprudence on his part. Now on examining the teeth we find the second upper molar on the right side decayed. On removing it, the next day all the hypopyon has disappeared, and all inflammation likewise in the course of eight days.—*Recueil d'ophthal.*, Paris, July, 1887.

Fulton (J. F.). A Case of Almost Complete Self-Enucleation of Both Eyeballs.—A man from Winnipeg, thirty-eight years old, while on a protracted debauch, was thrown into jail. The attendant found in the morning that he was of boracic acid, iodoform, or other non-irritating antiseptic, is to be practised. For constitutional treatment iron, arsenic, and cod-liver oil are relied upon, in conjunction with good hygiene. Although atrophied tissue cannot be restored, much may be done in this way to render the patient more comfortable and less annoying to others. In the discussion on the paper the question, "May not ozæna sometimes originate from infection?" was raised by Dr. Hunt. Still he regarded the bacillary theory unproven. In treatment he considered powders contra-indicated, since they tend to harden the secretions and retard their removal. A similar view was taken by Dr. Barr, whose opportunities for observation had been large. He advocated the use of an agent to stimulate the mucous membrane and increase secretion. He was in the habit of having the nostrils washed with a tepid solution of common salt, and occasionally with a weak solution of carbolic acid, salicylic acid, or permanganate of potash.

On Electrolysis in the Treatment of some Affections of the Skin and Mucous Membranes.—Among the cases cited by Mermod in *Rev. Méd. de la Suisse romande*, Feb., 1887, is one of intense coryza with great ulceration (?) of the septum and turbinated bodies, one of naso-pharyngeal catarrh with constant formation of psuedo-membrane. Complete cure resulted from the use of electrolysis, in five sittings in the former, and in two sittings in the latter case, other measures having entirely failed or given only partial relief. The effects are thought to be due to some special action, other than cauterization, upon the circulation and nutrition of the tissues. The positive rheophose should be large, the negative a metallic point, and they should be placed as near together as possible. For the nose the positive pole should be on the cheek of the side to be operated upon; for the pharynx it should be placed upon the nape of the neck. Pain may be controlled in a measure by cocaine. The occurrence of vertigo shows that the current is too strong. Six or eight cells of a zinc carbon battery are sufficien. —*Jour. Laryngol. and Rhinol.*, Aug., 1887

Galvanic-Cautery in Hay-Fever.—In the course of a discussion on "Reflex neurosis of the naso-pharynx," Mr. Geo. Stoxen stated that he had in two cases,

or shorter time, according to the action desired.—*La Thérap. Contemp.*, Sept. 2, 1887.

Trelat (U.) on Hemorrhoids and the Actual Cautery.—The patient being anæsthetized and placed upon the side, the syhincter ani is stretched by a dilating speculum. The hemorrhoids, which have pedicles or are very salient are then seized with red-hot irons, similar to large curling tongs, and instantly destroyed. Smaller and flatter growths are simply touched by a smaller and more manageable iron. Extreme care must be exercised in avoiding an unnecessary destruction of mucous membrane or in burning the anal margin.

Cicatrization, the author says, is prompt and healthy.—*Le Prog. Méd.*, June 18, 1887.

Illingworth (C. R.) on the Biniodide Treatment of Scarlet-Fever.—Taking two ounces of the bichloride of mercury solution, I carefully added a few drops of a 1 in 4 solution of the iodide of sodium or potassium, shaking the mixture after the addition of each drop, until I secured a cloudy-red liquid indicative of the precipitation of the biniodide. To this I added half an ounce of glycerine for the purpose of keeping the particles of biniodide in suspension. This mixture I applied twice a day with a straight brush in some severe cases of scarlatina anginosa, with the effect of arresting the inflammatory and ulcerative action in a very short space of time. I also injected some of it up the nostrils in one very severe case, in which the disease had extended behind the soft palate, and was causing profuse discharge from the nose, and with excellent effect. In cases where it might be thought advisable to make more frequent applications to the throat, the biniodide thus prepared might be easily applied by the nurse or mother of the patient with a little help. My practice is to introduce the handle of a tablespoon well back on the tongue, and then to apply the brush rapidly and vigorously to the affected parts of the throat.

I should think that the same application would prove of great service in diphtheria also.—*Brit. Med. Jour.*, Sept. 3, 1887.

Hutchison (J.) on the Tincture of Siegesbeckia Orientalis in Ringworm.—I never prepare the affected part, as I find that the mixture cleans the place, while at the same time it kills the parasite. The red blush which is produced during the application, and which causes an amount ment with cocaine and iodol insufflations gave no good results, the local lesions extended, and the patient soon died of exhaustion. In the second case the tonsillar ulcers healed after cauterization with the galvano-cautery, the disease meanwhile itfogressing in the larynx and lungs. In tn l case, unfortunately, the tissue of the mrohtwas not examined, but scrapings spohnsige ulcers contained umerous bacilli. For this reason the evidence as to the character of the ulcers may not be considered conclusive, since the pulmonary disease was far advanced, and the sputum contained large quantities of bacilli. The author accounts for the infrequency of recorded cases of primary tuberculosis of the tonsil on the ground of the impossibility of distinguishing the ulcers from those of syphilis, and by the fact that tubercular deposit seldom breaks down. Strassmann, in *Virchow's Archiv*, B. lxix., 2, cites a series of cases in which tubercles were found *post mortem* in tonsils apparently normal. Their degeneration, and the consequent formation of ulcers, may possibly be prevented by the great development of fibrous tissue in the tonsils. The prognosis in these cases is bad, on account of the pulmonary lesions and the danger of extension of the local disease. The lesion itself may be arrested by means of the galvano-cautery, and benefit may be derived from the use of cocaine and iodol.—*Brit. Med. Jour.*, Aug. 27, 1887.

Secondary Hemorrhage Following Uvulotomy.—In the *Med. Record*, Aug. 13, 1887, Dr. G. B. Hope reports a case of hemorrhage occurring eight days after excision of the uvula. The bleeding was venous and was controlled by torsion. The author knows of no other recorded instance of secondary hemorrhage occurring later than the second day. (See article by Dr. E. C. Morgan on "Hemorrhage following Uvulotomy," in *N. Y. Med. Jour.*, Oct. 16 and 23, 1886.)

A Simple Method of Procuring Deglutition where Such is Impeded by Reason of Extensive Ulceration of the Epiglottis.—In the *Lancet*, July 2, 1887, Dr. R. Norris Wolfenden gives a very simple plan, discovered by one of his patients, whereby swallowing may be accomplished with ease, and without producing that distressing cough so often seen in laryngeal phthisis after eating. It consists in lying flat upon the stomach with the

of both adductors, may cause serious obstruction. It is important, with the idea of determining the question of tracheotomy to discover whether the obstruction is laryngeal or due to pressure lower in the air-tract. In the former case the head is thrown backwards, the larynx descends during inspiration, the stridor has a metallic ring, and the voice and cough are altered or suppressed. In the latter case the head may be thrown forwards, the larynx is stationary, the stridor is whizzing, and the voice is weak but not otherwise altered. Tracheotomy should be resorted to in order to secure rest, since death may occur from asphyxia or from rupture of the aneurism during a paroxysm of dyspnœa. —*Glasgow Med. Jour.*, Sept., 1887 ; also, *Brit. Med. Jour.*, July, 1887.

MEDICINE.

Porter (F. E.) on Typhoid Fever with Unusual Features.—In August of 1885 I was called to a store to see a man who said he had taken cold during the rain of a week previous ; had headache, back and legs ached off and on ever since ; nose bled the morning before, face anxious and pale, eyes seemed prominent and larger than usual. Patient thought he had indigestion, and had for a few weeks back resorted to an apothecary for plain soda, which seemed to him to help him. Some rolling and tumbling in bowels, though no diarrhœa, tympanites, or sensitiveness to deep pressure in iliac fossæ. Surface dry, pulse 116, temperature 104°, respiration 32.

Advised him to at once go home, take warm bath, apply warm pack to abdomen, and drink, in the course of a couple of hours, a tumbler of water containing
and if sleepless and restless at bed hour take gr. vi. Dover's powder. The next morning he told me he slept well, sweat freely, and felt better. Pulse 94, temperature 103°. At 5 P.M., pulse 100, temperature 104.4° ; advised spongings with soda water, and Dover's powders gr. iv. at bed hour, if necessary. On second morning his pulse was 100, temperature 102.8°, respiration 24, bowels had not moved, though often threatened to ; tongue brownish coat on side ; tip clean ; said he "dreamed last night, and sweat in his sleep." 5.30 P.M., conclude that it exerts, in cold-blooded animals, an action on the heart similar to

More (J.) on the Treatment of Morphinomania.—With nitro-glycerine I give strychnine, ergot, or minute doses of digitalis. The "nitrite-acting substance"—nitro-glycerine—of itself is not sufficient, and a little tension help is obtained by the addition of digitalis, ergot, or strychnine. It is not merely the partial anæmia of the brain, or the mere blood fulness in the peripheral arterioles, which is to be removed, but it is the sluggishness of the peripheral current and the excess of blood in the venules and larger abdominal veins that gives the somatic and peripheral misery felt by all, or most, patients suffering from deprivation of their accustomed stimulant. The excessive sweating, so marked and constant a symptom, is evidently due to the hyper-venosity of the blood and the consequent imperfect tissue change, and in strychnine we have a remedy which, besides stimulating the vaso-motor centre, increases the excitability of the respiratory centre and thus prevents, according to Brunton, the accumulation of carbonic acid. The whole mystery of this induced ischæmia is, therefore, paresis of the vaso-motor and respiratory centres, from habitual over-stimulation resulting in an almost pathological lowering of blood pressure in those vessels carrying the nutrient and oxygenated blood ; hence the patient feels for the time as one feels after a serious bleeding.—*Lancet*, July 16, 1887.

Waddell (J. C.) on Poisoning by Fifty Grains of Chloral Hydrate.—A female, aged fifty years, was given by mistake the contents of a 3 oz. bottle, containing fifty grains of chloral hydrate, and one drachm of bromide of potassium. The patient was seen one hour afterwards, when she was found to be in a state of collapse, semi-comatose, cold, clammy, and almost pulseless. The conjunctivæ were insensitive ; pupils medium dilatation ; consciousness very slight, with low muttering, and rambling of ideas. The relatives had at once discovered the mistake, and were doing all that was possible to keep the patient awake, but the tendency to sleep was almost invincible. Pallor was extreme ; lips and mucous surfaces very livid, and breathing feeble. Amyl nitrite was at once administered by inhalation, followed by an emetic of sulphate of zinc, danger. Will atropia do such quick work ? —*New Orleans Med. and Surg. Jour.*, Sept., 1887.

of alarm in some people, is of no moment, and I never found it remain longer than a day or two after the medicine was stopped. Though my usual prescription is tincture of siegesbeckia and glycerine, equal parts of each, I see no reason why in obstinate cases the siegesbeckia might not be increased to three quarters and one quarter of glycerine. The tincture as supplied to me is of the strength of 1 in 8. To use the drug properly, it must be well rubbed into the diseased portion of the skin several times a day, not merely painted on.—*Brit. Med. Jour.*, Sept. 3, 1887.

Bundy (A. D.) on Resorcin in Phlegmons and Erysipelas.—The author has used a 20-per-cent. ointment of resorcin in lanoline in various erysipelatous conditions, with, he claims, excellent results. Sometimes he scarifies the part before he applies the ointment, and generally surrounds the part with plain or salicylated cotton.—*Med. Register*, Aug. 13, 1887.

Dodge (C. L.) on a Case of Chancroid Successfully Treated with Mercury.—To a chancroidal-looking sore on the prepuce the author had made all the commonly successful local applications without avail. He then put the patient upon 5-grain doses of mercury and chalk three times a day, and in less than a week decided improvement had taken place. In three weeks complete healing took place, when treatment was stopped. Fifteen months later no secondary symptoms had appeared, but the writer is still in doubt as to whether he had a chancre or chancroid to deal with.—*Therap. Gaz.*, July 15, 1887.

Pigornet on the Salicylate of Soda in the Treatment of Gonorrhœal Orchitis.—In his thesis the author claims that complete relief from pain can be brought about in a few hours by this treatment. This action is almost sure in cases of acute epididymitis with hydrocele. When the inflammation is located in the cord this medication often fails. Complete recovery, with perhaps some slight induration of the epididymis, ensues in less than eight or ten days.—*Bull. Gén. de Thérap.*, April 30, 1887.

Henry (F. P.) on the Medicinal use of Thymol.—Following the suggestion of Martini, in the *Annali Universali di Medicina e Chirurgia* for February, 1887, I have recently prescribed thymol in a number of cases of intestinal diseases, catarrhs, acute and chronic, and typhoid fever, with the tongue. This condition has been observed more frequently in women than in men, and produces a feeling of a foreign body, pain usually localized but sometimes radiating, and fatigue in speaking. Rice and Stoerk have noticed the occurrence of cough and spasm. The author considers that contact between the tip of the epiglottis and the base of the tongue, without undue antero-posterior folding of the epiglottis on itself, may commonly be taken as an indication of hypertrophy of the lymphoid tissue. A sensation of pricking and of a foreign body increased if the patient draws back his tongue as in gaping, are the usual subjective symptoms. The difficulty experienced by the patient in localizing these clinical phenomena has been especially noticed by Seifert in a recent article. McBride does not believe that a degree of hypertrophy sufficient to cause distressing symptoms is common, and he is not in accord with Swain, who has maintained that this condition is frequently the actual cause of globus hystericus. The hypertrophy may be destroyed by the galvano-cautery, or by nitrate of silver or chromic acid fused on with a probe, and applied under the guidance of a laryngeal mirror. The paper closes with the narration of a case. The epiglottis was caught in the hypertrophied œdematous tissue, but was easily released with a probe. Relief was temporary. Solid nitrate of silver fused on a probe was applied six or seven times at intervals of a few days. At first the sensations of pricking and of a foreign body were aggravated, but the symptoms disappeared with the gradual subsidence of the hypertrophy. Even then they could be reproduced by gaping or drawing back the tongue. When the symptoms are vague and the hypertrophy not prominent, the subjective phenonema may be for a time dispelled and a diagnosis reached by painting the upper surface of the epiglottis and the base of the tongue with a solution of cocaine.

Tuberculosis of the Tonsils.—After referring to the fact that primary tuberculosis of the tonsils has not yet been observed in man, and quoting from Virchow, Zeigler, and others to show the rarity of the lesion, Dr. W. Lublinski relates two cases of secondary tuberculosis of the tonsils. In one case a section of an excised portion of the tonsil showed large numbers of bacilli. The tubercular ulcers had no characteristic features. Occasional treat-

conclusive diagnostic sign, but a far better proof of its infectious nature is its close connection with septic affections which it is seen both to precede, [1] co-exist with, and follow.

Perret thinks[2] that clinical data prove the contagious, infectious nature of pneumonia. His experiments teach him that pneumonia can be produced by different microbes. Partly proving this he cites the concurrence of malignant endo-carditis and pneumonia; and notes the fact that the different infectious diseases, such as typhoid fever, measles, scarlatina, etc., are often complicated by pneumonia. Such being the case, it is rational to conclude that the pathogenic microbe of these affections is also the cause of the local affection jo the lung.

PATHOLOGY.

Perrenot on the Chloride of Camphor.—The chloride of camphor is obtained by passing a current of chlorine through an alcoholic solution of camphor. It has moderate toxic qualities, when given by the mouth, producing symptoms analogous to those of strychnine. The author claims it to be antiseptic, having the advantage of being unirritating, not easily absorbed, and preventing suppuration. It lessens vinous fermentation, but, like iodoform, is harmless to the *torula urinæ*. It checks the development of the microbe of osteo-myelitis, the virus of anthrax, and that of hog cholera. The author speaks well of its action as a surgical dressing, producing no erythema, as does camphor, and having no odor as does iodoform.—Thèse de Lyon., in *Rev. de Thérap.*, June 15, 1887.

Jackson (E.) on the Action of Stenocarpine.—It seems to me that this drug does possess certain powers, in degree at least, peculiar to it. My impression, from my present experience, is that the solution used, said to be a two per cent. solution, is a more powerful anæsthetic than the four per cent. solution of cocaine. It certainly has a more powerful influence on the frog. The frog killed by two grains of this solution had withstood the action of four grains of the four per cent. cocaine digitalis, slowing its action by increasing the length of its diastole, at the same time increasing the length of its systole. In warm-blooded animals its action on the applied locally over chest it gives almost immediate relief, in twenty-four hours almost entirely removing the dry cough.—*Med. Standard*, Aug., 1887.

Coghill (J. S.) on the Chlorate of Potash.—After an historical résumé of the introduction of this agent into modern therapeutics, he discussed the various theories which have been advanced as to its action, and rejected the idea that it was decomposed and yielded its oxygen to the blood. Experiments were detailed upon the human subject, from whom nearly all the salt given was afterward obtained from the urine. "As a salt exceptionally rich in oxygen, it has, without decomposition, the valuable property *per se*, by its mere presence, apparently by oxygenating or aërating the blood, and so, by restoring or exalting this vital character of the circulating fluid, influencing to a corresponding degree the nutrition and functional activity of the various tissues and organs of the body. Beyond this it does not appear to have any specific action in any disease." The beneficial effect of this agent upon inflammations of the throat and other mucous membranes has been established by experience. The ordinary lozenges are too strong, and are liable to exert a caustic action upon the mouth; he uses only two and a half grains in each troche, with white sugar. This, in combination with arsenic internally, is almost a specific in clergyman's sore-throat. It is a valuable tonic and stimulant in cases of cardiac debility and impoverished blood, as in anæmia and chlorosis. It is remarkable what effect this has upon the development of the fœtus, when given during the whole course of pregnancy. Several very interesting cases were cited.

In the discussion following, it was suggested by many participants that the sodium salt would be found as efficacious, and much safer.—*N. Y. Med. Record*, Sept. 10, 1887.

Wild (R. B.) on the Action of Quinine and Allied Substances on Contractile Tissue.—To summarize the results of my experiments, I believe that quinine acts essentially in the same manner on all forms of contractile tissue. In small doses it stimulates, as shown in the heart, the increased height of contraction of voluntary muscle, and the initial contraction of the vessels.

In larger doses, or after longer action of

the hammer, then moved and struck again until the inferior border of the pedicle was reached. This proceeding was repeated, each time using more force, until confident of having severed all its attachments. A pair of strong forceps with rotatory movement lifted the tumor out entire. The rest of the meatus was found to be free. Bleeding was very trivial. Hearing has improved steadily since. My reasons for using the chisel in preference to the American dental engine are these. First, I consider the operation with the chisel a safer one in a case such as this one. Second, that the growth may be got rid of at one sitting. The danger from slipping I do not believe so great as with the dental engine, and time much shorter. The measurements of the exostosis were 13 mm. long, 10 mm. wide, and 7 mm. thick.—*Liverpool Med. and Chir. Jour.*, July, 1887.

SURGERY.

Burnett (C. H.) on the Successful Removal of an Exostosis from the External Auditory Meatus by Means of Bone Forceps and Chisel.—In April last the patient applied for relief. The exostosis was on the anterior wall of the right canal. It had been growing for fifteen years. It had a pedicle like a polypus, and was about a centimetre in diameter, covered on its outer surface with thick insensible skin. It nearly hermetically closed the external meatus. In removing this growth five minims of a 5% solution of cocaine were injected by hypodermic syringe into the concha near the exostosis. The tumor and the adjacent parts were mopped with a 5% solution of carbolic acid. The tumor was seized by specially devised bone forceps and a piece cut off. Little pain was caused. Nearly one half of the tumor was thus removed. At first the bone was like vory, further it was somewhat cancellous. When so much had been accomplished it was found that the forceps could not act from the narrowness of the canal, so a small chisel and a hammer were substituted. And a few blows on the chisel directed at the pedicle removed it in bulk. The operation occupied one hour and twenty minutes. The pedicle was about one eighth the largest circumference of the tumor. After removal the remainder of the canal was found free from discharge and the table about 4 P.M., until late in the night and did not remember my call, though he answered questions rationally. He said that he frequently wished to address some particular remark, but almost invariably said something else, and, though aware of his mistake, could not correct it.—*Med. News*, March 26, 1887.

Poisoning by Datura Seeds.—On the 12th April last, Moti Ludha, the husband of the guilty woman, one Rehmoo Vullee, a dealer in ghee, and a young woman named Rasul, left their village of Sela in the morning for the purpose of fetching ghee from another village. Halting outside the first village they came to, they sat down to partake of their frugal meal. The girl sat apart and ate her *bajri* bread, while the two men sat and shared their own bread together, and gave the fragments to the girl, who subsequently made them over to the police. Later in the day as the party were proceeding in the afternoon towards Checkla village, the two men became giddy, began to stagger, and behaved like madmen. They soon became speechless and fell down on the road. The girl ran for assistance to the village of Checkla, but on her return both men were found dead. A post-mortem examination showed that they were poisoned with datura seeds, as they were detected in the pieces of bread left uneaten. The bread had been prepared by the accused for her husband the night before he started on the journey. The prisoner was found guilty of murder and sentenced to death, subject to the confirmation of the High Court. The motive for the murder was that this woman was carrying on an intrigue with another man, and wished to get her husband out of the way.—*Med. Press*, Aug. 24, 1887.

Dunlop (A.) on an Overdose of Eserine.—In a woman of sixty a solution of the strength of one gram to the ounce was prescribed and a drop was ordered to be placed in the eyes twice a day. The druggist put up a solution of gr. i to 3 i. At about 4:30 the same afternoon the first application was made, and a small drop of the solution placed in each eye. A good deal of smarting and lachrymation followed, and as this passed off, in about a quarter of an hour severe clonic spasm of the eyelids set in; the upper eyelid, as the patient hearing normal. The wound healed rapidly.—*Polyclinic*, New York, Aug., 1887.

especially in the exaggerated ones, the nystagmus is easily induced by constant starts unprovoked. The patient at the same time grows dizzy, but without nausea. Lights dance by him; he stumbles against obstacles which he usually can avoid. The hemeralopia is very marked. The face now has an anxious, drawn expression, a modified *risus sardonicus*. When the nystagmus is excessive, the man may fall. They are able, by standing still, and by peculiar actions, to quiet this movement and its attendant dizziness. Sometimes even mental agitation, seeing some one suddenly enter the room where they are, will start the symptoms. And in all well-developed cases there is, during the paroxysms, considerable palpitation of the heart. This disease always occurs in that class of miners called heavers. Examination of the eyes shows hypermetropia in all cases, and progressing insufficiency or complete paralysis of the ocular muscles. As the day advances sight diminishes, but after sleep, with its refreshing, the muscular strain is relieved and the sight is much improved.—*London Lancet*, July 26, 1887.

DISEASES OF THE NOSE AND THROAT.

ABSTRACTS AND SELECTIONS BY CHARLES H. KNIGHT, M.D.

On the Nature and Treatment of Hypertrophies and Tumors of the Nasal and Pharyngeal Cavities.—In the *London Lancet*, Aug. 27, 1887, Dr. J. L. W. Thudichum gives the notes of thirteen cases illustrating various points of interest. He advocates the electro-caustic method of treatment as being accurate and satisfactory, and depreciates the practice of indiscriminate superficial cauterization in reflex nasal neuroses. These conditions he believes to be dependent upon a constitutional dyscrasia. Nasal disease may be the exciting cause, but the local lesion must be unmistakably developed, and is preferably treated by abscission. He seems to have a strong antipathy to the "snare," and cites a case in which a piece of wire had been left in the nose for eight months. (This is by no means a legitimate objection to the cold-wire snare, but rather shows inexcusable carelessness on the part of the operator. In the case of nasal polypi the author says Constantin Paul has reported several similar cases.—*Rev. Méd.-Chir. des Mals. des Femmes*, July 25, 1887.

Drysdale (C. R.) on Multiple Still-Births in a Syphilitic Patient—Nine Dead Children.—Mrs. M., aged 37, in March, 1887, contracted syphilis when married in 1869, and had then sore throat and eruptions, which were pronounced to be syphilitic by her medical attendant. Her first child was born dead in 1870; her second, in 1872, at full term, also dead; the third, in 1873, at seven months, was dead; the fourth, in 1874, at nine months, was also dead; the fifth was an eight-months child, and was still-born; the sixth, a nine-months child, was still-born; the seventh was an eight-months child, and was still-born. Thereupon the patient began again to take iodide of potassium and sarsaparilla, and in 1882 she was delivered of a nine-months child, which had not exhibited any eruptions on the buttocks, snuffles, nor other symptoms of syphilis. The ninth child, born in 1883, was also dead, and the tenth, born in 1886, lived a month, and then died of inanition. This unfortunate patient, then, who had married at nineteen years of age, had actually had during seventeen years nine still-births and dead children due to the syphilitic poison she had acquired from her husband. The child born in 1882, and which accompanied its mother, was red-haired, and its teeth, first dentition, were much decayed, but was lively, and had no specific marks of hereditary syphilis.—*Med. Press*, June 29, 1887.

More-Madden (T.) on the Causes and Treatment of Barrenness.—According to the author the most frequent cause of sterility is stenosis of the cervical canal.

The method of treatment employed by him is the separation by cutting and simultaneous forcible expansion of the affected parts, followed by dilatation during the period of cicatrization, so as to prevent their subsequent contraction, and thus to secure the permanent patency of the previously occluded passage. To obtain this result he employs three instruments, namely: a special form of uterine director, which can, generally speaking, be introduced into any cervical canal, however narrow, and along which a serrated, triangular-guarded knife is made to travel up through the os internum; and, thirdly, a uterine dilator of great power, by which any required degree

pain referred to the whole side of the pelvis and hip. Deep pressure from the front of the abdomen in the direction of the synchondroses, and by the rectum, may produce pain and tenderness. In standing there is some lordosis; the weight rests on the sound limb, and the body is carried in that direction. The pelvis is oblique, and there will be apparent lengthening of the limb on the diseased side. In walking, the whole pelvis with the body above is swayed forward when the weight is on the sound leg, the ball of the foot being the centre of rotation. It is not so much a limp as an ungainly lurch of the whole side of the body.

Abscess may occur early, or may be deferred for months, or even years.

The treatment before abscess forms consists of rest in recumbency in the posture which is easiest for the patient, leeches, blisters, and the thermo-cautery. After abscess forms, evacuation and scraping out all diseased tissues.—*Australian Med. Jour.*, June 15, 1887.

DISEASES OF THE EAR AND EYE.

ABSTRACTS AND SELECTIONS BY A. T. MUZZY, M.D.

Stone (M.) on Ivory Exostosis Removed from External Auditory Meatus.—The patient has occasionally noticed a slight but offensive discharge from the left ear, since nine years of age. Since sixteen—he is now thirty-four—colds have rendered him deaf, each succeeding attack leaving him a little harder of hearing than the one before. One year ago he was attacked by severe pain in this ear and learned the nature of his trouble.

The hearing on the left side is very defective; watch barely heard on contact. The meatus almost completely blocked by a pinkish polypus-appearing body. Its attachment was to the upper, posterior, and inferior walls of the canal. The operation undertaken was by means of a chisel, the patient being put under the influence of ether. The chisel chosen was a small hollow ground, one such as used by Schwartze of Halle for opening the mastoid. The chisel was directed first against the upper portion, so that the groove corresponded to the shape of the canal, and by resting the there is sufficient vascularity to insure a copious flow of pus (I would suggest a point below the axilla, on a level with, and about two inches posterior to, the nipple), this being done at the very first indication of the symptoms of incipient phthisis, attended with all of the hygienic auxiliaries that are recommended in such cases, would, as I believe, afford the most rational and effective preventive measures that have yet been discovered in connection with this the most dreaded and destructive enemy of human life.—*Southern Practitioner*, Aug., 1887.

Bell (J.) on a Case of Intussusception Extending over Twenty-Four Days; Natural Cure; Death from Cerebral Thrombosis.—The patient was a man of 64, who gave the history of intussusception, at ileo-cæcal valve, of at least four days' duration, with already local peritonitis and adhesions, and, from the extreme fœtor of his breath, probably already death of the prolapsed portion.

The question of laparotomy was discussed; but it was considered that if the diagnosis was correct, little good could be effected by the operation, which, in his exceedingly low state, it seemed would prove rapidly fatal. It was explained to his brother how serious the case was, and that the chance of recovery lay in the spontaneous escape of the prolapsed bowel and union of adhesions.

A good nurse was got. Every thing by the mouth was interdicted at once. A hypodermic injection of ¼ gr. of morphia was given, and rectal injections ordered. Ice was given to suck in small quantities. From that moment no further vomiting occurred; neither thirst nor hunger gave him much trouble. The morphia was repeated twice in twenty-four hours, and the injections of beef-tea and eggs were given at twelve hours', and eventually at eight hours' interval. After the seventh day of this treatment he was allowed a teaspoonful at a time of beef-tea and milk alternately, at first every hour, and then every half-hour, and all was retained. Flatus began to pass about the tenth or eleventh day from the onset, and on the fourteenth fæces began to come with a little grumous discharge. Both flatus and fæces were intensely offensive.

I was sent for again on the 21st July to see him on account of a hemiplegic attack, which had completely paralyzed his left

sive amyloid degeneration of the viscera, or a moribund condition of the patient.

The chances of mortality are not greater than the chances given in amputation of the thigh in general.

The chances of permanent cure (barring the mutilation) would appear to be greater than after excision at the hip-joint.

The amputation should be done subperiosteally whenever it is possible. An elastic tourniquet gives the best means of preventing hemorrhage.

Preliminary excision of the head of the femur, in freeing the upper part of the shaft, will be found to facilitate the amputation.—*Boston Med. and Surg. Jour.*, Feb. 24, 1887.

Bird (F. D.) on Sacro-Iliac Disease.—The disease, I believe, is a rare one. The several causes are :

The strain of parturition.

Traumatism (a blow).

Over-fatigue, as in hip disease.

Struma.

Pelvic cellulitis.

Sarcoma, invading the joint from ilium or sacrum.

The symptoms of this disease vary very much in accordance with the exact situation of the inflammation, with the acuteness of the process, and with the constitutional predisposition of the patient. As a rule, the pain is dull and heavy in character, and diffused all over that side of the pelvis and buttock, also extending down the course of the sciatic nerve. It may, however, be localized over the region of the joint, or at the hip-joint, or the inner side of the knee. Approximation of the idea is a deceptive proceeding for diagnosis, as is also pulling them asunder. Pressure on the trochanter does not necessarily cause pain. In the form of the disease in which the lateral surfaces of the bones are affected there exists, as an incipient sympton, a peculiar feeling of weakness, of insecurity, of giving way at the lower part of the back, which is very characteristic, and which progresses with the disease into a pain, which suggests the idea of falling to pieces, or being rent asunder, when the upright position is assumed, or locomotion attempted. Increase of the superincumbent weight to be supported by the joint, stooping, and rising from a stooping position, always cause an exacerbation or an accession of pain. Abduction of the thigh when the patient is lying flat on a couch causes sults. The first was that of a patient who had serious hemoptysis twelve times in six days ; three milligrammes of sulphate of atropine were injected ; there was no recurrence of hemoptysis. The same result was obtained in the second patient, in whose case the administration of turpentine preparations and injections of ergotin had produced no improvement. In the third case a patient suffering from repeated hemoptysis was cured by two subcutaneous injections of three milligrammes of sulphate of atropine.—*Brit. Med. Jour.*, Sept. 3, 1887.

Kollock (C. W.) on the Toxic Effects of Small Doses of Duboisine.—Chadwick has reported[1] a case in which $\frac{1}{10}$ gr. of the drug "instilled for examination of a senile cataract, produced a state of delirium lasting many hours, leaving the patient totally unconscious of what had occurred. There was great muscular weakness, and strange actions were performed."

In the latter case a solution of duboisia sulph. (gr. j to aq. dest. f 3 ij) was prescribed for the purpose of examining the refraction of the eyes. One drop was instilled in each eye at 2 P.M., after which the patient took a nap. He awoke feeling somewhat dizzy, but had another drop put in each eye at 4 P.M. Upon going to dinner soon after he became so dizzy and blind (as he expressed it) that he was obliged to leave the table and lie down. I saw him about an hour later—three hours after first instillation. He was in bed, face flushed, pupils widely dilated, and body moving uneasily from side to side. Although apparently rational, his speech was thick, and remarks frequently without meaning or irrelevant. There was no headache, but mouth and throat were very dry, and he drank copiously of water. I directed that he be kept quiet, and that no more of the drug be used.

The next morning he came with his sister for examination, having fully recovered from the toxic effects of the drug. His sister, a bright and intelligent young lady, told me that although he seemed at times sensible, still he did not get quietly to sleep until 5 A.M., and that he continually talked to her as if she was some one else but when asked who she was, invariably said "sister." The patient had no recollection whatever after leaving the dinner hand against the head, fear of slipping was removed. The chisel was tapped gently b

MEDICAL ANALECTIC

LY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

collaboration of CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending on, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Orthopedic Surgeon to St. Luke's Hospital.

., No. 2. January 12, 1888. WHOLE No. 50.

CONTENTS.

	PAGE
icles	17
	21
	25
	26
s	27

DING ARTICLES.

d's Disease.—The medical hich has appeared since Ray- article on the malady which me, contains a number of cases to alter the point of view from affection is to be regarded. escribes three stages: 1st, local aracterized by extreme pallor; phyxia, characterized by lividi- l, local gangrene, the parts af- g usually the fingers, exception- s, nose, ears, and integument of s of the body. One marked of the disease, the symmetrical f parts, has given rise to the mmetrical Gangrene" for the s of the malady. The attacks paroxysmal, and by no means eyond the first or second stages. elieved that spasmodic contrac- smaller arteries caused all the In two cases he observed that of the retinal arteries occurred, rnately, in the other simultane- the characteristic phenomena in From these cases he argued isease was probably of spinal

t complete review of the subject et appeared is that of Hochen- dizinische Jahrbucher," 1885), heading "Symmetrical Gan- is division of the causes of spontaneous gangrene is as follows: I. Diseased vessels. II. Nervous disturbances (trophic or vaso-motor), including acute decubitus, ergotism, (?) and symmetrical gangrene (in narrow sense of author); III. As result of pathological state of blood either of unknown nature or from diabetes or albuminuria. He himself regards the cases described under the heading of Raynaud's disease as depending partly on nervous influences and partly on unknown blood changes. He groups clinically the recorded cases under four heads. I. Occurring from constitutional states: (*a*) as result of over-exertion; (*b*) in chlorosis and chloro-anæmia; (*c*) in chronic inflammatory and acute infectious diseases, only such cases being included in which vascular disease could be surely excluded. II. Hysterical cases. III. Symptomatic of neuritis. IV. In diseases of the brain and cord. In some of these cases preliminary vaso-motor changes were observed, in others not. To the writer the inclusion of cases occurring in inflammatory and infectious diseases in this heading seems of questionable propriety, as these cases might be more properly regarded as septic, that form of gangrene being expressly regarded by Raynaud as a class apart from his group of cases. The cases in which its association with neuritis was shown by autopsy are four; that with spinal disease, one, viz., a case of syringo-myelitis without peripheral nerve lesions. The alleged connection with brain lesions is based on one case of gangrene of the toes in a patient with right hemiplegia with subsequent passing off of paralysis and coming on of cerebral degeneration. This case is any thing but conclusive.

Weiss reported a clinical case in which the typical phenomena of Raynaud's disease occurred in the hands of a patient

sive amyloid degeneration of the viscera, or a moribund condition of the patient.

The chances of mortality are not greater than the chances given in amputation of the thigh in general.

The chances of permanent cure (barring the mutilation) would appear to be greater than after excision at the hip-joint.

The amputation should be done subperiosteally whenever it is possible. An elastic tourniquet gives the best means of preventing hemorrhage.

Preliminary excision of the head of the femur, in freeing the upper part of the shaft, will be found to facilitate the amputation.—*Boston Med. and Surg. Jour.*, Feb. 24, 1887.

Bird (F. D.) on Sacro-Iliac Disease.—The disease, I believe, is a rare one. The several causes are :

The strain of parturition.

Traumatism (a blow).

Over-fatigue, as in hip disease.

Struma.

Pelvic cellulitis.

Sarcoma, invading the joint from ilium or sacrum.

The symptoms of this disease vary very much in accordance with the exact situation of the inflammation, with the acuteness of the process, and with the constitutional predisposition of the patient. As a rule, the pain is dull and heavy in character, and diffused all over that side of the pelvis and buttock, also extending down the course of the sciatic nerve. It may, however, be localized over the region of the joint, or at the hip-joint, or the inner side of the knee. Approximation of the idea is a deceptive proceeding for diagnosis, as is also pulling them asunder. Pressure on the trochanter does not necessarily cause pain. In the form of the disease in which the lateral surfaces of the bones are affected there exists, as an incipient sympton, a peculiar feeling of weakness, of insecurity, of giving way at the lower part of the back, which is very characteristic, and which progresses with the disease into a pain, which suggests the idea of falling to pieces, or being rent asunder, when the upright position is assumed, or locomotion attempted. Increase of the superincumbent weight to be supported by the joint, stooping, and rising from a stooping position, always cause an exacerbation or an accession of pain. Abduction of the thigh when the patient is lying flat on a couch causes sults. The first was that of a patient who had serious hemoptysis twelve times in six days ; three milligrammes of sulphate of atropine were injected ; there was no recurrence of hemoptysis. The same result was obtained in the second patient, in whose case the administration of turpentine preparations and injections of ergotin had produced no improvement. In the third case a patient suffering from repeated hemoptysis was cured by two subcutaneous injections of three milligrammes of sulphate of atropine.—*Brit. Med. Jour.*, Sept. 3, 1887.

Kollock (C. W.) on the Toxic Effects of Small Doses of Duboisine.—Chadwick has reported[1] a case in which $\frac{1}{10}$ gr. of the drug "instilled for examination of a senile cataract, produced a state of delirium lasting many hours, leaving the patient totally unconscious of what had occurred. There was great muscular weakness, and strange actions were performed."

In the latter case a solution of duboisia sulph. (gr. j to aq. dest. f 3 ij) was prescribed for the purpose of examining the refraction of the eyes. One drop was instilled in each eye at 2 P.M., after which the patient took a nap. He awoke feeling somewhat dizzy, but had another drop put in each eye at 4 P.M. Upon going to dinner soon after he became so dizzy and blind (as he expressed it) that he was obliged to leave the table and lie down. I saw him about an hour later—three hours after first instillation. He was in bed, face flushed, pupils widely dilated, and body moving uneasily from side to side. Although apparently rational, his speech was thick, and remarks frequently without meaning or irrelevant. There was no headache, but mouth and throat were very dry, and he drank copiously of water. I directed that he be kept quiet, and that no more of the drug be used.

The next morning he came with his sister for examination, having fully recovered from the toxic effects of the drug. His sister, a bright and intelligent young lady, told me that although he seemed at times sensible, still he did not get quietly to sleep until 5 A.M., and that he continually talked to her as if she was some one else, but when asked who she was, invariably said "sister." The patient had no recollection whatever after leaving the dinner-hand against the head, fear of slipping was removed. The chisel was tapped gently by

E MEDICAL ANALECTIC

LY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

e collaboration of CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending on, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Orthopedic Surgeon to St. Luke's Hospital.

V., No. 2. January 12, 1888. WHOLE No. 50.

CONTENTS.

	PAGE
icles	17
s	21
	25
	26
us	27

DING ARTICLES.

id's Disease.—The medical which has appeared since Ray- article on the malady which arne, contains a number of cases to alter the point of view from affection is to be regarded. escribes three stages: 1st, local aracterized by extreme pallor; sphyxia, characterized by lividi- l, local gangrene, the parts af- g usually the fingers, exception- es, nose, ears, and integument of s of the body. One marked of the disease, the symmetrical of parts, has given rise to the mmetrical Gangrene" for the s of the malady. The attacks paroxysmal, and by no means beyond the first or second stages. elieved that spasmodic contrac- smaller arteries caused all the In two cases he observed that of the retinal arteries occurred, rnately, in the other simultane- the characteristic phenomena in From these cases he argued isease was probably of spinal

t complete review of the subject yet appeared is that of Hochen- dizinische Jahrbucher," 1885), heading "Symmetrical Gan- is division of the causes of spontaneous gangrene is as follows: I. Diseased vessels. II. Nervous disturbances (trophic or vaso-motor), including acute decubitus, ergotism, (?) and symmetrical gangrene (in narrow sense of author); III. As result of pathological state of blood either of unknown nature or from diabetes or albuminuria. He himself regards the cases described under the heading of Raynaud's disease as depending partly on nervous influences and partly on unknown blood changes. He groups clinically the recorded cases under four heads. I. Occurring from constitutional states: (*a*) as result of over-exertion; (*b*) in chlorosis and chloro-anæmia; (*c*) in chronic inflammatory and acute infectious diseases, only such cases being included in which vascular disease could be surely excluded. II. Hysterical cases. III. Symptomatic of neuritis. IV. In diseases of the brain and cord. In some of these cases preliminary vaso-motor changes were observed, in others not. To the writer the inclusion of cases occurring in inflammatory and infectious diseases in this heading seems of questionable propriety, as these cases might be more properly regarded as septic, that form of gangrene being expressly regarded by Raynaud as a class apart from his group of cases. The cases in which its association with neuritis was shown by autopsy are four; that with spinal disease, one, viz., a case of syringo-myelitis without peripheral nerve lesions. The alleged connection with brain lesions is based on one case of gangrene of the toes in a patient with right hemiplegia with subsequent passing off of paralysis and coming on of cerebral degeneration. This case is any thing but conclusive.

Weiss reported a clinical case in which the typical phenomena of Raynaud's disease occurred in the hands of a patient

who had sloughs on the nates, where no vaso-motor disturbances were obvious, and on the left cheek, which was flushed as the result of a typical paralysis of the sympathetic. This case had also other nutritive disturbances. This case and those in which neuritis or cord lesions were found *post-mortem* seem to strongly support the idea that absolute death of parts is one form of trophic disturbance which may result from lesions of the nervous system. The absence in many cases of preceding vaso-motor disturbances, and especially the above-quoted case of Weiss', suggest that although local syncope and asphyxia are closely associated with the gangrene which sometimes follows them, yet they are probably both effects of a common cause, not cause and effect. The great variety of conditions which are associated with the Raynaud's disease has led to the belief (Grassét, Hochenegg) that the condition is not to be regarded as an independent disease at all. It would seem best to use the terms *local syncope*, *local asphyxia*, and *symmetrical gangrene* simply as descriptive of symptoms, as we use the terms *anæsthesia* or *muscular paralysis*, the associated condition being stated in the title of recorded cases. If the term Raynaud's disease is to be used at all it should be sharply restricted to the class of cases which would fall without question under the description at the beginning of this article. In a recent number of the *Medical Record* is recorded a case of "Raynaud's disease" in which there were no vaso-motor disturbances and no gangrene. It was a case of gradual ulceration of the finger tips with loss of the nails, etc. The case appeared to be a trophoneurosis well worthy of record, and possibly belonged to the same group of affections as the genuine Raynaud symptom-complex, but it certainly was not the morbid condition described by Raynaud. This case may be taken as typical of others that might be cited. It is better, in the present state of our knowledge, to record such cases under a descriptive heading. The number of obscure disorders, nutritive and sensory, of the extremities already described in medical literature, is large. It is best not to deceive and confuse ourselves with mere names which only serve as a cloak for our ignorance.

The therapeutic results obtained bear out the views above enumerated. Whatever good is done, apart from the sheltering of the diseased members from cold, results from treatment of the associated morbid condition. The reported cures from use of the constant current, a happy condition by no means uniform, seem to tally with the probability of a peripheral nerve lesion as being a frequent cause of the symptoms.

R. VAN SANTVOORD, M.D.

Pulmonary Surgery.—The toleration of surgical interference which the pleura is found to possess has tempted the surgeon still further, until, commencing with puncture and intra-pulmonary injection, we now often see cases reported where the actual parenchyma of the lung is invaded by the knife and ordinary surgical procedures are applied to organs heretofore held to be resentful of traumatism.

A very brief review of some of the most recently recorded cases of pneumotomy may prove acceptable.

Godlee,[1] in some lectures on the surgical treatment of pulmonary cavities, gives some very interesting data concerning early advocates of pneumotomy. Among these Barry [2] was one of the first (1726), although there is nothing in his writings to show that he performed the operation. Hastings [2] (1845), however, did apparently open and drain two genuine cases of tubercular cavities at the apex, one of which improved under treatment.

De Cérenville [2] (1885) reports the following cases.

F——, aged fifteen. Advanced phthisis, with consolidation and excavation of the upper lobe of the left lung. Parts of the second and the third ribs were excised, and threads were passed through the pleura into the lung in order to ensure adhesions if these were not present. Four days later, an attempt to reach a large cavity resulted only in the discovery of a small one. The operation appears to have had but little influence on the progress of the disease. The patient died three weeks after the first operation.

F——, aged twenty-five. Advanced phthisis; cavities in the left upper lobe. Parts of the second and third ribs were removed, and a large cavity was opened. The cough and expectoration were very much relieved, and the cavity decidedly

[1] *Lancet*, March 5, 1887, *et seq.*

[2] Quoted by Godlee.

contracted; the patient living five weeks after the operation.

Blower reports [1] a case of abscess of the lung which was evacuated by means of an incision over the seventh rib on the left side at the posterior axillary line. Two inches of the rib were removed, and an incision was made through the thickened and adherent pleura into a pulmonary abscess the size of an orange, from which a large amount of fetid pus escaped. The cavity was washed out with a 1–500 sublimate solution, and two drainage tubes were inserted to the bottom of the cavity.

The local trouble was progressing favorably and convalescence seemed assured, when, on the 14th day, he was suddenly seized with an epileptiform attack. Other cerebral symptoms followed, and death occured eleven days later. On autopsy the cavity in the lung showed a healthy granulation process and was much smaller than when opened. In the left cerebral hemisphere were five small abscesses, one of which had burst into the left lateral ventricle.

In a case of pulmonary abscess, caused by inhaling a piece of grass, Godlee [2] made an incision in the sixth interspace near the nipple line on the right side, and passed his finger into an irregular cavity in the lung, which extended upwards and backwards and which contained considerable fetid, sanguineous pus. Immediate improvement ensued, but the patient eventually died with symptoms of cerebral abscess.

In a case of bronchiectasia, caused by a dislodged tooth, Godlee [3] excised a portion of the ninth rib on the right side and opened a greatly dilated bronchus. Slight improvement ensued, but the case soon terminated fatally with advanced tubercular changes at both apices. In another case of bronchial dilatation [3] the enlarged bronchi were reached and partially drained, but, there being no adhesions between the pleural surfaces, some of the discharge gained access to the pleural cavity and a septic inflammation was set up which nearly terminated fatally. The ultimate result in this case was not known.

Strange reports [4] a remarkable case of gangrenous abscess of the lung, probably caused by the stump of a tooth passing into the right bronchus. The patient was a healthy young woman of twenty-three, who developed pulmonary symptoms a few days after she had the stumps of several teeth removed under chloroform. Unmistakable signs of pulmonary gangrene soon followed, which in turn gave way to signs of abscess and extensive excavation. Medicinal treatment was of no avail, and the patient was fast succumbing to hectic and loss of sleep. Five months from the access of the cough it was decided that only an evacuation of the abscess could save the patient.

A large curved trocar was inserted below the ninth rib, and one inch behind the axillary line, to a depth of eight inches in a direction upward and forward towards the fifth interspace in front. At this depth fetid pus escaped in abundance, and a drainage tube was inserted. The cavity was syringed out once or twice a day with an antiseptic, and complete cure resulted in fifty-five days.

In a patient whom Dr. Bastian had aspirated, Godlee [5] removed a piece of the eighth rib behind and opened a cavity in the lung about the size of the finger and two and a half inches long. Great temporary improvement followed, but the patient died many months later of tuberculosis.

A girl of nineteen developed signs of gangrenous abscess of the lung. Godlee [2] made an incision in the posterior axillary region and the eighth intercostal space. The pleura was adherent, and an incision through the lung gave free vent to twelve ounces of fetid pus when the depth of about four inches was reached. Free drainage was established, and ultimate recovery with retraction of the chest took place.

A woman of forty-four was seized with signs of acute pleuro-pneumonia. Godlee [2] made an opening in the seventh interspace below the left nipple, evacuating a large amount of pus. Immediate improvement supervened, and ultimate recovery after a free discharge of pus from the bowels.

Bowen [6] has recently opened and drained a large pulmonary cavity, apparently of pneumonic or tubercular origin. He removed one and a half inches of the ninth

[1] *Liverpool Med.-Chir. Jour.*, vol. vii., 1887, p. 16. [2] *Lancet*, April 2, 1887.
[3] *Lancet*, April 9, 1887.
[4] *Brit. Med. Jour.*, Nov. 26, 1887.
[5] *Lancet*, March 12, 1887.
[6] *Cincin. Lancet-Clinic*, Dec. 24, 1887.

rib below the angle of the left scapula, found the pleural surfaces adherent, and finally reached the cavity with a large trocar. A small drainage tube was inserted in the track of the trocar. The sinus was dilated daily by passing rubber catheters. Fluids injected into the cavity could be coughed up. The cavity in this case was at least two inches from the pulmonary pleura. Immediate improvement followed the evacuation of pus; cough was lessened, and the temperature fell a degree and a half. At the time the case was reported the improvement had continued and the temperature was normal.

Dubrueil[1] practised pneumotomy in a case of gangrene. He excised three cent. of the middle of the sixth rib on the right side. Three small cavities were found, which he made into one and washed out with a three per cent. solution of boric acid. Considerable temporary improvement ensued, but the patient ultimately succumbed.

Cayley reports[2] a case which was a low form of pneumonia, resulting in a basic cavity containing five or six ounces of offensive pus and sloughs of lung substance. He had only been ill for five weeks, but had the appearance of a man in the last stage of phthisis. The cavity was opened in the ninth interspace, but the case ended fatally, being already too far advanced. There were signs of old tubercular mischief in the lungs. The same author reports[3] a case of gangrenous abscess following ear disease, in which Mr. Gould punctured the abscess with a trocar, but on introducing the tube failed to drain the cavity at first; it afterwards, however, burst into the artificial opening, and the patient made a good recovery.

Smith of Halifax records[3] a case where gangrene followed acute pneumonia, and where death followed an incision into the abscess after nine days.

Bull of Christiania records[3] a case of circumscribed gangrene of the lung, which was opened successfully.

Biondi,[1] an Italian, and some German experimenters[1] have shown that occasionally a lower animal will survive the complete extirpation of one lung; and they recommend extremely heroic surgical measures for the relief of unilateral tubercular diseases. In two cases of phthisis parts of the lung have been actually removed by Ruggi, one of the patients dying in a few hours, and the other on the ninth day.[3]

Accidentally or intentionally, parts of the lung have been excised with morbid growths. Truc[4] says that when extirpating the breast, if the lung is only slightly involved by the growth the diseased part should be excised.

Weinleicher, in 1882,[5] removed a round tumor as large as a man's head from the thoracic wall of a man aged thirty-seven, leaving a huge gaping opening into the chest, and taking away a part of the lung to which it was adherent; the patient died twenty-four hours afterwards. Kroenlein also removed a recurrent sarcoma in the same situation from a girl aged eighteen, taking away part of the sixth rib and some adherent lung. The end of this case is not reported.

Godlee[6] thus summarizes the whole subject: 1. Gangrenous cavities should always be sought and, if possible, opened, and the prognosis, if the operation be successful, is not bad. 2. The same may be said in regard to abscesses caused by the rupture of purulent collections from other parts into the lung, at least as regards the pulmonary complication. 3. Abscesses connected with foreign bodies must be opened, and if the body be not found, it must be remembered that, if of any considerable size, it probably lies pretty near the middle line; if possible, these cases should be treated early by tracheotomy and incision. 4. Bronchiectatic cavities, when single (a very rare condition), will be cured by operation; when multiple (a very common condition), they offer but small chance of relief by our present surgical methods. Still, for the reasons stated, an attempt may be made to open the main one, if such is to be found, but only if the pleura has been ascertained to be adherent. 5. Tubercular cavities should only be opened in cases where the cough is harassing and the cavity single. Injections may be used to relieve symptoms, but cannot be expected to be curative.

Dr. G. Foubert (*Archives général de Méd-*

[1] *Gaz. Hebd. des Sci. Méd. de Montpellier*, Oct. 29, 1887.
[2] Quoted by Godlee: *Lancet*, March 12, 1887.
[3] Cited by Godlee, *Lancet*, March 5, 1887.
[4] *Rev. Méd-Chir. des Mal. des Femmes*, Nov. 25, 1887.
[5] Quoted by Godlee, *Lancet*, March 5, 1887.
[6] *Lancet*, April 9, 1887.

ecine, October, 1887,[1]) has recently collected the cases of pneumotomy so far reported, and analyzed them, with somewhat instructive results. The total number of cases is eighty, with forty-seven cures and thirty-three deaths. As will be seen by the record given below, however, the high percentage of cures is due to the hydatid cases, in which the operation is often very simple.

The success, however, with gangrenous cavities, and in bronchiectasis and abscess, is fairly good, if the reports indicate in any measure the true proportions. The summary is as follows:

1. Tuberculous cavities, in which there was incision made either with or without a resection of the rib, seven cases. In one, that of John Hastings, recovery is said to have occurred; in another case, the patient lived for some time; in the remainder the patients died.

2. Abscess of the lung, fourteen cases, with nine cures and five deaths. In two of the fatal cases, death could not be attributed to the operation.

3. Hydatids of the lung and pleura, thirty-four cases with twenty-nine cures. Probably in some of these cases the hydatids were pleural. These figures relating to the hydatids were collected for the most part by Dr. J. Davie Thomas, and it is noticeable that the most of them (twenty-five) refer to Australia. Only one, pneumotomy, for hydatids, had been reported in American literature up to 1885.

4. Gangrene of the lungs, eighteen cases, with nine cures; two ameliorations and seven deaths.

5. Bronchiectasis, twelve cases, with four cures.

The above figures require little comment. They show fairly good results for pneumotomy in gangrene, abscess, and hydatids; but for tuberculous diseases, surgery has as yet done nothing.

THERAPEUTICS.

Is Iodoform Antiseptic?[2]—The influence of this substance is still the subject of incessant controversy, and the result of numerous bacteriological researches seems to prove that many micro-organisms can resist its action. Very many authors contest its utility from a clinical standpoint, and exaggerate the dangers accruing from its use. Heyn and Rovsing[3] from a clinical point of view deny its parasiticide power, and even say that it may be the vehicle of certain germs prejudicial to the healing of wounds. The latter author even declares[4] that the vitality of tubercle bacilli is not lessened by iodoform, and further that the tissue, irritated by the drug, becomes a particularly favorable nidus for the bacteria.

Rovsing has placed in the anterior chamber of rabbits' eyes pure cultures of tubercle bacilli, and the same which had been previously treated by iodoform, and in both instances equally, has seen a tubercular process follow, at first local and then general.

De Ruyter[5] admits that in culture experiments iodoform seems inert, but asserts that the exudation of wounds decomposes it into a more active agent, and that, under such circumstances, it does become antiseptic.

Konig[6] allows iodoform a very restricted influence over microbes in general, and denies totally its power over the tubercular bacillus. He claims that it acts only as a desiccant, in this way favoring the primary healing of wounds, and depriving also, in a mediate way, the tubercle bacilli of material necessary to their development.

Binz has shown[7] that, on the mesentery of frogs, iodoform checks the emigration of white blood corpuscles. Baumgarten's[8] views are similar, as the following experiments will show:

1. If tubercular matter be injected into the trachea of a rabbit, there will be produced, at the point of puncture, a tuberculous nodule even if powdered iodoform is at once applied to the part. On the other hand, if the canula has been previously sterilized by a sublimate solution, 1:1000, infection will not take place.

2. Cultures of tubercle bacilli are triturated with from ten to forty parts of iodoform, and then introduced into the cellular tissue of rabbits and guinea-pigs. These animals invariably have local, followed by general, tuberculosis, and as speedily as

[1] Edit. *New York Med. Record*, Oct. 29, 1887.

[2] From a critical review by Dr. Oscar Delbastaille in *Ann. de la Soc. Méd.-Chir. de Liège*, Nov., 1887.

[3] *Forts. der Med.*, No. 2, 1887.

[4] *Forts. der Med.*, Bd. v., p. 257.

[5] *Archiv für klin. Chir.*, Bd. xxxv., Hft. 1.

[6] *Therap. Monatshefte.*, April, 1887.

[7] *Therap. Monatshefte.*, May, 1887.

[8] *Berl. klin. Wochen.*, No. 20, 1887.

animals in whom the pure culture is used. The same results have been obtained by Kunze with the microbe of septicæmia, the bacillus of charbon, and the staphylococcus pyogenus aureus.

Bruns and Nauwerck[1] have carefully studied tubercular abscesses treated both with and without iodoform, and claim to have found histological and bacteriological proofs that iodoform has an anti-tubercular action.

Jeffries (J. A.) on the Anti-Bacterial Action of Iodoform.—As a result of many experiments, the author concludes that iodoform has no direct action as a germicide, a result agreeing with Heyn and and Rovsing; also, that germicidal products are, probably, not derived from it in the presence of growing bacteria. On the other hand, experiments with bouillon show that the presence of iodoform markedly retards the growth of bacteria, an action not before proven, and diminishes the foul odors of putrefaction. The diminution in odor cannot be ascribed to the action of iodoform on the bacteria, as pointed out before.

Why the iodoform failed to give positive results in the Heyn and Rovsing class of experiments is obscure. It may be due to the fact that in spite of the iodoform crowding quickly occurs, the injurious effects of which, by restricting, quickly obliterate the action of iodoform.

Looked at from the clinical side, the ultimate object of all medical research, the following rules may be accepted :

1. Iodoform, not being a germicide, is not a fit substance to use to procure asepsis of instruments, materials, or wounds.

2. Iodoform is allowable, with the present state of our pharmacopœia, in infected wounds where the true germicides are contra-indicated, as by danger of poisoning or impracticability.

3. As has long been known, iodoform has a decided tendency to stop serous oozing, and therefore may be indicated in wounds where the moisture threatens the integrity of the aseptic or antiseptic dressing.—*Am. Jour. Med. Sci.*, Jan., 1888.

Asepsis and Antisepsis. — Doctor Léon Tripier, professor of clinical surgery at Lyons, sterilizes the cotton, gauze, and water, which he uses in dressing wounds, and finds these precautions, combined with extreme cleanliness, of the greatest use. In fact he asserts that, in non-suppurating lesions and wounds away from the natural orifices of the body, this simple asepsis suffices, and there is no need to have recourse to the so-called antiseptics ; and, moreover, that in the absence of asepsis (cleanliness) antisepsis is of little or no avail.—*Lyon Méd.*, Dec. 11, 1887.

Willits (Mary) on a Serious Defect in Therapeutic Literature.—In a timely paper on the above subject the authoress calls attention to the careless way many contributors have of reporting cases. She says : When speaking of the treatment, the *name* of the drug used is given, rarely any thing more ; nothing in regard to its dose, frequency of administration, or length of time it should be continued. This applies not only to a drug which has been in use for some time, and with the action of which we are supposed to be acquainted, but even to a new remedy with which many of us are not familiar. We have never used it or known of a case where it has been used. We are interested in its effects in the case reported ; but are entirely at a loss as to how to administer it if we should wish to do so.

Often we are left in doubt regarding the form of the drug, whether liquid or solid ; if the latter, whether or not it is soluble ; we have no idea how to make the dose palatable, or whether it is already so ; and all must admit that this is an important factor in prescribing, especially when practising among children.

In the case of old drugs the omission is almost equally grave ; every one has his own method of administration. After some years of experience with remedies, he learns that certain doses and certain preparations act best for him, and he employs them accordingly, giving the dose as frequently as he has found necessary. He reports an interesting case, in which he speaks of the efficacy of a certain drug. Some physician reads the article, has a similar case, uses the same remedy, but not in the same manner, nor the same preparations ; the result is unsatisfactory, and the remedy is discontinued, while the author of the article is condemned, either as having misrepresented the nature of the disease, or as having exaggerated the efficacy of the drug. In some instances a drug should be given until a certain effect

[1] *Mittheil. aus der Chir. Klin. zu Tübingen*, Bd. iii., 1887.

is produced, regardless of quantity; the reporter of a case should be careful to state whether he prescribed it that way, or whether a dose, as specified by our writers on therapeutics, was given.

Frequently, the writer will say that a "full dose" of some drug was given; in consulting works on Materia Medica, we find that different authorities on the subject differ in regard to the dose in many cases, so that a "full dose" conveys but little meaning to us. Then, too, there are persons who are very susceptible to medicine and can take but small doses, large ones affecting them most unpleasantly.

A frequent error in medical works, which are used as books of reference and text-books for students, is that under the head of "Treatment" of disease, will be a long list of remedies which have proved efficacious in the hands of one or more practitioners who have used them; perhaps one drug has proved beneficial at one stage of the disease, another at another stage; nothing is said in regard to that; they are all put down in one long list, no mention being made of the dose or preparation which was used. As each drug may have several different preparations, and each of these several different doses, the recent graduate cannot help but grow perplexed and bewildered as he attempts to study up a case, and either wish that our cases were more like those reported, or that books were written for young practitioners instead of for those who have had years of experience in the profession.

The same mistake is made by writers on electro-therapeutics. We read an article extolling the merits of this method of treatment for certain maladies, but are frequently left in total ignorance as to the kind of current—galvanic or faradic—its strength, length, or frequency of séances, or on what parts of the body the electrodes are to be applied.

When speaking of treatment by this method, the amount used at a séance should be specified, either as measured by the galvanometer or milliampère meter, or if no notice were taken of the amount, as measured by one of these, and a current regulated by the toleration of the patient was used, let us be told whether it was as strong as could be endured, or whether merely a pleasant sensation of warmth was produced.—*Med. Times*, Nov. 15, 1887.

Castle (F. A.) on an Improved Container for Hypodermic Solutions.—Instead of closing a phial, holding a solution for hypodermic use, with a stopper, draw over the orifice an India-rubber nursing-bottle nipple *without holes in its point.* To fill a syringe, push the needle through the rubber, tip the phial bottom upward, and draw the desired amount of solution into the syringe. When the needle is withdrawn, the puncture in the rubber will close, and prevent either escape of solution or entrance of air.

By properly sterilizing the solution and nipple, and using a clean needle, the solution will remain for a long time without change.—Letter to *N. Y. Med. Jour.*, Nov. 19, 1887.

Althaus (J.) on the Use of Glycerine Enemas in the Treatment of Habitual Constipation.—The fact that glycerine thus used causes a ready action of the bowels was apparently discovered by a Dutch physician, Dr. Oidtmann, who, however, deprived himself, at least to a great extent, of the credit of this discovery by advertising it as a nostrum in several medical journals. Dr. Anacker took the trouble to analyze the fluid and found it to consist principally of glycerine, to which a small quantity of a preparation of conium and a sodium salt had been added. Dr. Anacker found that glycerine alone, without conium or the sodium salt, had exactly the same effect injected into the rectum by means of an ordinary glass syringe in amounts of from one to two teaspoonfuls.

An evacuation generally takes place, either immediately or within a few minutes after the injection. The explanation of the effect given by Anacker, and which is no doubt the true one, is this: glycerine when brought into contact with the mucous membrane of the rectum, withdraws water from it, thus causing hyperæmia and irritation of the sentient nerves of the rectum, which in its turn leads reflexly to powerful peristaltic contractions, ending in defæcation. The larger the accumulation of fæces, the greater is the effect. There is no discomfort or pain. Sometimes, however, a little throbbing is felt in the rectum for a few minutes afterwards.—*Br. Med. Jour.*, Dec. 24, 1887.

The Use of Opium in Labor.—An anonymous correspondent to the *Provincial Med. Jour.* (Nov. 1, 1887), writes:

I now, when called to the parturient,

habitually administer an opiate at the onset of labor, and have frequently found distinct benefit derived therefrom, and have as yet certainly seen nothing to prevent my continuing its use.

As a rule, I have found after its administration the pains becoming more regular in character; occasionally they occur with greater rapidity, and are longer and stronger. That opium has any effect on unstriped muscle I do not believe, but rather attribute the result to the soothing influence of the drug on the system generally. Moreover, I have noticed that opium is extremely well borne in the parturient, and a one-grain pill may be fearlessly administered at the onset of the pain, and even repeated at intervals in a protracted case. I do not deny that this drug retains the effect of chloroform longer in the system, but I do not think it interferes in any way with the very safe use of the anæsthetic in obstetrical practice.

Dr. C. O. Ganse, of Lane, Kansas, uses gelsemium and morphine combined. He writes[1]:

During a period of several years and with quite a number of cases, I have had no occasion to resort to the use of ergot, or to the use of instruments. This combination accelerates labor while it relieves all the acuteness of the pains, promotes the secretions, and insures against a dry-birth, lowers vascular tension, thereby lessening the danger of puerperal convulsions. I have never noted any of the usual depressing effects of morphine after its administration in this matter, consequently have adopted the practice of combining it with gelsemium in all other cases where it is indicated. I have not had an opportunity to test it in puerperal convulsions, but I fully believe it would meet all the requirements, administered hypodermically, as I noted the prompt relief where those symptoms were present. I usually commence with the following recipe:

℞—Tinct. gelsemini . . . . f 3 jss.
Morphinæ sulphatis . . gr. j.
Aquæ . . . . . f 3 vj.

M. Sig.—A teaspoonful every half hour until the patient is brought under the influence of the mixture; then give as often as indicated.

It will also prevent any spasmodic or hour-glass contractions of the uterus, relieves false or neuralgic pains, after-pains, allays fear and anxiety, prevents hemorrhage and difficulty in delivering the placenta. In closing I wish to drop a word of caution: Always be sure to have a genuine article of tincture of gelsemium. Test it by adding a drachm to a few drachms of clear water: if good, it will give a bluish tint to the solution; if dark, reject it.

[1] *Kansas City Med. Index*, Nov., 1887.

Quinine vs. Opium.—Mr. John Ferguson, a resident of Ceylon, has drawn attention to the widespread use of opium in malarial districts, and he ascribes the opium craving in such places to a low type of fever. He believes that sulphate of quinine, and even the other alkaloids from cinchona bark, counteract the ill effects resulting, and his suggestion is that quinine removes the craving and acts as a substitute for laudanum. This explanation is obviously insufficient. Quinine evidently combats the malarial influence, and thus removes the low state of depression which favors the opium habit, into which the unfortunate people gradually glide in the attempt to forget their physical condition. In this way only does it appear probable that quinine acts in superseding the need for opium, its action being tonic and prophylactic rather than antidotal.—*Lancet*, Dec. 24, 1887.

Hayward (F. E.) on Sodium Fluosilicate.—Sodium fluosilicate, the new antiseptic which has recently been coming into use, promises to prove an equally effective and much safer substitute for corrosive sublimate in midwifery practice. It is but slightly soluble in water, only to the extent of about two thirds per cent. at 60° F.—that is, a pint of water will dissolve about fifty grains. It should be used in saturated solution. A few powders of fifty grains each will form but a trifling addition to the weight of the midwifery bag.—*Brit. Med. Jour.*, Dec. 24, 1887.

Mental Disorder Caused by Jaborandi.—Dr. Wauzh, of Liège, who has great belief in the efficacy of jaborandi as a stimulant of the mammary functions, mentions a case which has recently occurred in his practice, showing that inconveniences may occasionally arise from the administration of this drug. He prescribed ten drops of the fluid extract every four hours for a patient whose milk had ceased for a fortnight, with satisfactory results, the secretion being re-established. After a time, however, the patient began to suffer

from extreme nervous excitement, accompanied by a fixed idea that she should murder all her family with a hatchet. On the jaborandi being stopped, these alarming symptoms disappeared, and together with them the activity of the mammary glands.—*Lancet*, Dec. 24, 1887.

SURGERY.

Nankivell on Four Cases of Amputation through the Thigh.—Four cases of amputation through the thigh, which were treated during a period of six weeks in St. Bartholomew's Hospital under the care of Mr. Nankivell, are reported in *The Lancet*, December 17, 1887.

CASE 1. *Compound fracture of both thighs in a man aged forty-seven, from railway accident, with compound depressed fracture of skull and other injuries; amputation through upper third of both thighs; secondary hemorrhage and ligature of the femoral artery in the stump; recovery.*—J. M., aged forty-seven, a navvy, was run over by a train on July 30, 1887. He was admitted into the hospital an hour and a half after the accident, when he was found in the following condition. The right thigh had been completely severed from the body by an oblique wound passing through the lower half of the femur; the left leg was in a hopeless condition, the whole tibia being crushed, while there was an extensive lacerated wound laying open the knee joint, and the femur was fractured above the condyles; there was also a compound depressed fracture of the skull, involving the frontal and parietal bones on the right side, and the soft parts over the sacrum were extensively bruised. The general condition of the patient was bad, he was very much exhausted from pain and loss of blood, with small quick pulse, but was quite conscious.

Although the case seemed hopeless it was thought right to give him what little chance could be afforded by operation. Accordingly ether was administered, and Mr. Nankivell amputated both thighs through their upper third, by anterior and posterior skin flaps, with circular division of muscles; the stumps were dressed with eucalyptus and iodoform oil. During the operation, which lasted fifty minutes, the patient's condition improved considerably, the stimulating effect of the ether being very marked. No attempt was made to elevate the depressed fragments of the skull, as the depression was not great and there were no head symptoms; the wound was merely united by a few stitches and dressed with eucalyptus oil.

A bed-sore formed over the right buttock, which had been injured at the time of the accident.

On September 6th secondary hemorrhage occurred from the left stump. Ether was given, the stump opened and the femoral artery exposed. A small opening was found in it, and a ligature was tied above and below this point. On Dec. 1st patient is reported "practically well."

CASE 2. *Compound fracture of the left femur and punctured wound of the right thigh; amputation through the upper third of the left thigh; secondary hemorrhage from the right thigh, and ligature of the femoral artery; recovery.*—C. B., aged sixteen, was run over by a trolly on July 28th, and was admitted into the hospital an hour afterwards. On the left side there was a compound fracture of the femur into the knee joint and lacerated wounds of the thigh; there was also a second fracture of the femur a little above the middle. On the right side there was a punctured wound extending completely through the fleshy part of the thigh, and passing near the femoral artery; the skin of the calf was almost completely torn off, exposing nearly the whole of the gastrocnemius muscle, and the first metatarsal bone was dislocated from the internal cuneiform.

Ether was given, and the left thigh amputated through its upper third. The stump was thoroughly washed out with carbolic lotion (1 in 20) and dressed with antiseptic gauze. The wounds of the right thigh and leg were carefully united by stitches and dressed in a similar manner, and the dislocation of the metatarsal bone was reduced without difficulty. In the evening thirty-five minims of liquor morphiæ were given, and the patient had a good night.

A few days afterwards the skin of the right calf began to slough and a large healthy ulcer was left. With this exception all went well until August 9th (twelfth day, when, without any warning, violent hemorrhage suddenly commenced from the wound in the right thigh. A tourniquet was at once applied by the nurse, which stopped the bleeding; but as soon as this was slackened blood again came out in

jets. Ether was therefore given, and the wound laid freely open, when the femoral artery was exposed; in one part of its course a small hole could be seen, from which blood spurted whenever the pressure of the tourniquet was removed. The vessel was tied with catgut above and below the wound, and divided between the ligatures; the external wound was sewn up, and a drainage-tube inserted. The patient after this recovered steadily, the large ulcer on the right calf healed slowly under the influence of Martin's bandage and frequent applications of solid nitrate of silver, and on Nov. 2d he was discharged from the hospital.

The third case was one of gunshot wound of the head of the tibia, opening the knee-joint, followed by suppuration in the joint. The thigh was amputated through the knee-joint. Recovery.

The fourth case was one of compound fracture into knee-joint complicated by delirium tremens. Amputation through lower third of thigh. Death.

GEO. B. PHELPS, M.D.

MEDICINE.

Dreyfous (F.) on Alcoholic Hysteria.—At the close of an exhaustive article on this subject[1] the author thus summarizes the symptoms characterizing the disease:

There was hemianæsthesia in 15 cases; apoplexy in 2; vertigo in 4; hystero-epileptic attacks in 10; localized contractures in 2; hemichorea, or, rather, a unilateral choreiform tremor, in 4; mutism (accompanying right hemiplegia) in 3; in short it has much the same sort of symptoms as other toxic hysterias (mercurial and saturnine), with which he classes it.

Gem (W.), on Retention of Urine Preceding Apoplectic Attacks.—W. S——, aged sixty, laborer, of temperate habits; has had rheumatic gout for some years; was admitted into the infirmary in 1882, and has been readmitted off and on ever since for rheumatic gout. Heart sounds normal, but has atheromatous arteries; has had iritis, but no other defect of vision; urine normal; suffered from retention for six days, after which he had a severe apoplectic attack, with consequent left hemiplegia.

C. E——, aged forty, car-man; intemperate; had rheumatism for some time; was admitted in 1882, and has been readmitted off and on ever since for rheumatism and cardiac valvular disease; has albumen in urine, but sight is good; had retention for seven days, followed by an apoplectic attack and right hemiplegia.

W. C——, aged fifty-seven, laborer; intemperate; had rheumatic gout for some years; admitted for such in 1885; heart sounds normal; double optic neuritis, but urine normal; had retention for ten days, after which he had a severe apoplectic attack and complete left hemiplegia.

G. W——, aged forty-nine; baker; habits not known; admitted for melancholia, and was transferred to an asylum; being discharged some time after on trial, he was readmitted for subacute rheumatism; heart sounds normal; sight not ascertained (too restless); urine normal; had retention for four days, and then had an apoplectic attack, with subsequent right hemiplegia.

All the above cases were treated as follows: Perfect rest, blistering the nape of the neck, croton oil, and warmth to feet, *plus* the following drugs: Bromide of potassium, decoction of aloes, and compound spirits of ammonia; followed up afterwards with the iodides. The very best results were obtained by this treatment, with the exception of the last case, which is recent.

The drugs above mentioned need no comment from me, as their actions are too evident, but I may say that I have had the most favorable consequences from them in two cases I anticipated, where retention had been complete for two or three days. The query of course arises, Would such cases have gone on to an apoplectic attack? I have every reason to suspect such an unfortunate accident, as the one patient had an intense localized headache, with retinal hemorrhages; the other not so well marked. The first one was readmitted after some time with a recent hemiplegia, showing that such an untoward event had been previously warded off.—*Lancet*, Nov. 19, 1887.

Humphreys (F. R.) on the Treatment of Coma in Young Children by Hypodermic Injection.—CASE 1: An infant, aged ten months, very ill for fourteen days with broncho-pneumonia, complicated by relapses. When first seen (3:40 A.M.) the child was deeply unconscious, unable to swallow, the lips blue, and dying. It had been in this condition for

[1] *L' Union Méd.*, Nos. 135, 136, 140, 145, and 147, 1887.

two hours previous to my being sent for. The condition had come on very gradually. 3:40 A.M.: Pulse, 176; respiration, 96. Three minims of brandy were injected hypodermically. 3:45 A.M.: The brandy injection was repeated. The mouth was noticed to be drawn down to the right. 4:05 A.M.: Pulse, 168; respiration, 92. Better; coughed a little; nystagmus; hypodermic injection of $\frac{1}{100}$th of a grain of digitalin. The child opened its eyes, looked about, and was able to swallow a little. 4:30 A.M.: Pulse, 168; respiration, 86. The child had improved so much that I left. It died at 9 A.M. I was told it gradually relapsed into its former state. I was only called in in the absence of the doctor in attendance. On making a hurried physical examination the right lung appeared nearly solid, and the left was badly affected.

CASE 2: A boy, aged nine months, suffering from measles (fifth day). The rash had gone a few hours before. Hyperpyrexia, with consolidation of the left lung, having set in, the doctor who was in attendance declared the case hopeless, and said he would not come again. I was therefore asked to see what I could do. When first seen the child had just had a convulsion, but I was told it had been unconscious for some hours. The lips were blue, the pupils extremely contracted, and I could get no reaction to any stimulus. 3:30 P.M.: Respiration, 12; temperature, 104.8°. It was wrapped in a wet sheet, an enema of brandy, egg, and milk administered, and a hypodermic injection of two minims of brandy given. 4:50 P.M.: Respiration, 22; temperature, 102.7°; pulse, 140. The child was breathing better, and appeared improving. During this period six minims of brandy and $\frac{1}{100}$th of a grain of digitalin were separately injected under the skin. 7:30 P.M.: Temperature, normal; much better; able to swallow. The consolidation cleared up, but meningitis set in, and the child died from exhaustion on the seventh day after I first saw him. Each time he flagged, brandy or digitalin was administered hypodermically, and each time there was temporary improvement. The child was unhealthy, living under bad hygienic circumstances, in great part nursed by a mother who was absolutely ignorant of such work, and it was only after repeated relapses that it finally succumbed.—*Br. Med. Jour.*, Dec. 3, 1887.

McCartney (J. C.) on the Treatment of Shaking Palsy.—I have found nothing to excel the *Æsculus Glabra*.[1] I make a tincture from the inner bark, cut fine, and cover with alcohol, let stand fourteen days, and prescribe as follows:

℞ Tincture of Æsculus . . . ʒ ss.
Distilled water . . . . . ℥ viii.
SIG.—Teaspoonful every two or three hours.

I have seen in fifteen minutes after the administration of a single dose the muscles under complete control of the will. It is well to keep the bowels open with a vegetable purgative.

You that have patients suffering from chorea would do well to try the *Æsculus*.—*Medical Herald*, Nov., 1887.

MISCELLANEOUS.

Richardson (B. W.) on Acute Pulmonary Paresis.—At the last meeting of the Medical Society of London, Dr. B. W. Richardson called attention to a class of cases presenting such peculiar features as to warrant, in his opinion, the belief that the symptoms are due to a loss of nerve power, resulting in acute vaso-motor paralysis of the vessels in the pulmonary area. Though not common, most practitioners must be able to call to mind cases, diagnosed as pneumonia, where the patient rapidly dies of asphyxia in spite of all that can be done to check the morbid process. The cases are mostly women of a neurotic type. Under the influence of a physical or moral shock, not necessarily of any great intensity, nervous phenomena of an hysterical type manifest themselves, followed by intense prostration of body and mind. In the course of a day or two, examination reveals the advent of pneumonic râles, and then, without fever, for the most part without pain and without many of the characteristic signs and symptoms of ordinary pneumonia, the patient rapidly succumbs. Treatment in every case is utterly without avail. Not less interesting than the observations so carefully narrated, are Dr. Richardson's remarks on the effect of nitrite of amyl in bringing about an identical condition of things in animals submitted to its influence. The pathological phenomena are those which physiology teaches us result from section of the nerves which innervate the

[1] Ohio Buckeye.

lungs; and, on this ground, Dr. Richardson argues that the asphyxial phenomena which terminate the rapid and fatal course of this redoubtable disease are attributable to a sudden suppression of nerve power. It could hardly be anticipated that this addition to medical nomenclature would pass unchallenged; and, while the paper will certainly call attention to a class of cases hitherto very imperfectly understood, his views evidently failed to find acceptance on the grounds put forward on their behalf. It appears certain that, to explain the sudden and violent breaking down which is met with in certain cases of so-called pneumonia, either some influence must have been superadded to the usual processes, or we must look to another category of causes altogether to account for the collapse.—*Br. Med. Jour.*, Dec. 17, 1887.

Prettyman (J. S.) on Gonorrhœa in Young Children.—On August 25th a boy of nine years was sent to be operated upon for phimosis. Upon examination I discovered that he was suffering from acute urethritis with balanitis, and refrained from operating. He admitted having several times in the previous three weeks attempted sexual intercourse with a colored girl, seventeen years of age. Two days afterward an older brother, aged eleven, came to me with the same disease and acknowledged infection from the same source.

Ten days ago I visited a girl of nine, the youngest member of a family of excellent social position, and found her with a severe urethritis and vaginitis. She had already been treated three weeks by external applications to the vulva, her physician thinking she had a cutaneous disease. I diagnosed gonorrhœa, and put her under treatment. At present she micturates without pain and the discharge has entirely ceased. Letter to *N. Y. Med. Record*, Nov. 12, 1887.

Abaly (W. C.) on Boracic Acid in Gonorrhœa.—My experience with boracic acid and glycerine, in the treatment of subacute and chronic gonorrhœa, has been so successful for the past year that I can confidently say it is almost a specific; I have used it in thirty cases, and only in three did it fail. One of them was a heavy drinker of spirituous liquors, and the other two had strictures which it was necessary to treat in the usual way before the discharge ceased. The mode in which I use the acid and glycerine is as follows: I prepare about two drachms at a time, which is sufficient for one séance, using half a drachm boracic acid and one and a half drachms glycerine; then, by the use of a soft rubber catheter of proper size—one which will pass easily the full length of the urethra—and a hard-rubber syringe, with a nozzle of large enough calibre to allow the paste to flow freely, I commence injecting from the prostatic urethra, gradually withdrawing the syringe and stripping the catheter with thumb and forefinger, until the full length of the urethra has been thoroughly saturated. This is to be repeated every second day. I always have patient urinate before using the treatment, or, what I sometimes do in case of a new case, to locate the prostatic portion, is to allow the catheter to pass into the bladder, allowing the urine to come away, then withdraw and use the acid and glycerine injection. The desire to urinate is quite urgent for a few minutes, but soon passes off. In some few cases, in order to avoid urination, and the dislodgment of the paste thereby, I have the patient immerse the full length of the penis in cold water, which always lessens the desire.—*N. Y. Med. Record*, Nov. 26, 1887.

Merklen on a Case of Tachycardia Due to Bronco-Tracheal Adenopathy.—A young man of 18, with no other antecedents than an old acute articular rheumatism, entered the hospital for dyspnœa and palpitation. For eight days he had suffered from anorexia, insomnia, and violent thirst. His aspect was that of a sufferer from advanced heart disease. The pulse was small, rapid, and uncountable, while the heart was found to beat at the rate of 160, regularly and without murmur. Signs of congestion of the liver and spleen were evident, and the jugulars were full. All cardiac remedies failed, and the patient died of syncope. On autopsy the liver, spleen, and kidneys were found enlarged and congested. The heart was dilated, and the endocardium healthy. There were some pleural adhesions, but no tuberculosis of the lung. A group of tubercular glands surrounded the right bronchus, and passed up along the trachea to the inferior border of the larynx. At one point a glandular mass, 4 centimetres thick, surrounded the pneumogastric nerve and its cardiac branches, which evidently by its pressure paralyzed the nerve and gave rise to the rapid and weak pulse.—*Le Courier Méd.*, Nov. 26, 1887.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital.

VOL. V., NO. 3. January 19, 1888. WHOLE NO. 51.

CONTENTS.

	PAGE
Leading Articles	29
Orthopedic Surgery	31
Pathology	35
Miscellaneous	37

LEADING ARTICLES.

Stiffness of the Great Toe in Male Adolescents.—The cases seen by Mr. R. Lucy (*Brit. Med. Jour.*, April 2, 1887) occurred in boys soon after puberty. The symptoms are pain in the metatarso-phalangeal joint of one or both great toes, with inability to bend the toe upwards, the attempt being accompanied with pain. The toe can be flexed. Manipulation causes pain, and there is some tenderness about the ball. There was no history of injury, rheumatism, or gout.

Mr. T. J. Verrall (*Brit. Med. Jour.*, April 9, 1887) has seen three cases. There was a family history of rheumatism. Treatment by better-fitting boots, rest, iodide of potassium internally, and ointment relieved but did not cure.

Mr. H. B. Blackburn (*Brit. Med. Jour.*, April 23, 1887) attributes the condition to backward pressure from short and shallow boots.

Mr. J. M. Cottrill (*Brit. Med. Jour.*, May 28, 1887) says: "I am convinced that most, if not all, typical cases are dependent upon a combination of flat foot (or tendency to it) with rigid and short boots. Flat foot alone will not produce it; ill-fitting boots alone will not do so; it requires a combination of the two.

"The articular cartilage of the metatarsal bone is uncovered on its dorsal aspect, as would happen in strong flexion of the toe (this I have verified on a good dissected specimen); the dorsal portion of the capsular ligament is at the same time put severely on the stretch. These fibres do not at any time admit of great movement of the toe in flexion, and the pain is referred to the part, and sub-inflammatory changes taking place in it are, I believe, amply explained by these two circumstances."

Mr. T. S. Ellis (*Brit. Med. Jour.*, May 28, 1887) says: "It cannot be too strongly enforced that the principal function of the flexor muscles is not to flex the great toe, but to press it during progression against the ground in all its length. Herein is the manifest advantage of having the phalanges in two rather than in three segments, as in the case of the other toes. The point of greatest pressure being at the point between the two phalanges, there is no uprising anywhere; whereas, in the case of the smaller ones, the downward pressure being at the joint between the second and third phalanges, the backward traction causes a distinct uprising at the joint between the first and second. This result, however good for gripping the ground, could not give that firm, solid base from which the body may be propelled onwards, which is the main purpose of the great toe to supply. I would add that in the case of the great toe, the uplifting effect of the backward traction of the long flexor is also felt at the joint behind the one at its attachment; but this is not an inter-phalangeal, but the great metatarso-phalangeal, joint. By this means effective provision is made for relieving that joint from the severe pressure which the weight of the body, coming directly on it when it occupies the position of the lower pier of an up-tilted arch, would otherwise occasion.

"Another point of importance is that the flexor muscles are powerful abductors, drawing the great toe away from the mid-

dle line of the foot, towards which it tends when at rest, and bringing it into line with the inner margin, or even beyond, so as to form a slight concavity. This double effect of the flexors is impeded by eversion of the foot, and it must of course be prevented by fixing the great toe in a diverted position, as is done by the conventional median-pointed boot. Thus the muscles become irritable, and deformities ensue. The restoration of the function of the part cannot be attained without boots giving plenty of room for the great toe to come into straight line." JOHN RIDLON, M.D.

On the Treatment of Hernia.—The importance of early operative interference in a case of strangulated hernia is now, fortunately, much more generally recognized than formerly. There are, however, without doubt many deaths yearly from this affection, because no operation had been performed, or, if performed, performed too late.

That which now chiefly interests surgeons regarding hernia seems to be the best means of effecting a radical cure. On this subject W. Mitchell Banks says [1]:

"The operation which I have adopted is this. In inguinal hernia, the sac, after being cleanly dissected out, is opened, and all bowel is replaced and adherent omentum tied and cut away. The sac is then well pulled down, ligatured as high up in the canal as possible, and removed. Finally, the pillars of the ring are brought together by two or three silver sutures, which are left in position. In femoral hernia the cleaning and removal of the sac constitute the whole operation, and no attempt is made to close the femoral aperture. In ventral and umbilical hernia use is frequently made of the whole or part of the sac as a kind of plug to stop the aperture, which is generally large, and in which it is seldom possible to adopt any means of approximating the edges which seems likely to be permanent. I have adhered to this method of procedure for two reasons: first, because, in order to judge of the value of any given operation, it must be done many times by the same man, who is then in a position to judge accurately of its good qualities and its defects; and, secondly, because the operation is the simplest that has been yet devised. This is a most important point, because an operation that can only be done by the inventor thereof, or by a few highly trained operators, can never in the nature of things become popular. Hernia is a universal disease, and any operation for its cure must be such as can be safely and easily done by any surgeon of average experience and ability."

He tabulates fifty-two cases of hernia of moderate size, not strangulated, operated on in this manner, with two deaths. Twenty-nine of these were cured. Three were failures. Of the remainder, some were improved; others not traceable.

Sixteen very large and enormous herniæ were treated, with four deaths.

Thirty-eight cases of strangulated hernia were operated on, with three deaths.

Of the ninety cases of moderate-sized, non-strangulated and strangulated herniæ combined, twenty-four died or could not be traced. Forty-four were cured, seven improved, one doubtful.

In concluding the writer says: (1) That he believes a properly fitting truss can be worn without the slightest discomfort. (2) That in children operative procedures are rarely called for, a well-fitting truss usually curing the herniæ of children. (3) That small femoral herniæ with adherent omentum, or inguinal herniæ that cannot be kept up on account of adherent omentum, or by reason of their weight, should be operated upon.

(4) He then says:

"I do not think that any person should be subjected to operation who can wear with comfort a truss which keeps his bowels securely in position. Not one of my sixty-eight cases was of this kind; and I have persistently refused to do operations upon such persons, even when sent to me specially for operation by my medical friends. In consequence of my refusal to operate they often went away much disappointed. Had I considered it right to operate upon such persons I could easily have doubled the number of my cases. But if I had a rupture myself and found that a truss made me safe and comfortable, I would by no means be operated upon, and what one would refuse to undergo one's self one ought not to do to anybody else."

(5) He recommends that a light truss be worn after the operation.

MacEwen gives a detailed account of his operation in the *British Medical Journal* for December 10, 1887, with illustrations. It has been previously described in the

[1] *Brit. Med. Jour.*, Dec. 17, 1887.

ANALECTIC (July, 1887). He reports sixty-five cases of inguinal hernia treated by his method, sixteen of the number having been cases of strangulated hernia. Of these sixteen three subsequently wore a light pad. There were no deaths following the operations, and but one failure to obtain a cure.

Of the total number operated on, however, nineteen had been under observation less than one year.

Robson[1] reports twenty-four cases of hernia treated by ligation of neck of the hernial sac and excision. In some cases the pillars of the ring were sutured.

Two patients died of bronchitis. The remainder are reported cured, though five were ordered to wear a truss.

Puzey,[1] in discussing this same operation, says:

"One most important point in the operation is to get the neck of the sac ligatured high up. I like to have my finger inside the sac, at the internal ring, whilst a colleague or other assistant presses the ligature up beyond the tip of my finger, and thus ties the sac at the internal ring itself. If the sac is thick and unyielding, or very large, so that there appears a possibility of the ligature slipping (which I have seen occur), I transfix it with a large needle, draw the ligature through, and tie first one portion of the neck of the sac only, so as to get a firm hold, then carry the same ligature round the whole of the neck, and tie firmly just above the first ligature; then it cannot slip."

Of twenty-four cases operated on by him he could trace but seven, all of whom were cured.

Dr. C. B. Ball[2] has used torsion of the sac in the treatment of reducible hernia in twenty-two cases, all of which recovered. Of this number three continued to wear a truss, there being a slight impulse on coughing. In this operation the sac is carefully freed from the cord and emptied of its contents, opening it, if necessary, to ascertain that this is actually the case. The sac is then grasped with clamp-forceps, and given four or five complete revolutions, or until there is marked resistance. A stout cat-gut ligature is then tied about the neck of the sac, and its ends cut off. Two strong silk sutures are then passed through the skin at a distance of one inch from the outer edge of the wound, thence through the outer pillar of the ring, the twisted sac, the internal pillar, and skin, about one inch from the inner margin of the wound. The sac is then cut off, a cat-gut drain placed in the wound, and the sutures tied over lead buttons. If need one or two superficial sutures may be added.

Stoker[3] speaks highly of this operation, and has successfully practised it in a number of cases. GEO. B. PHELPS, M. D.

[1] *Brit. Med. Jour.*, Dec. 17, 1887.
[2] *Brit. Med. Jour.*, Dec. 10, 1887.

ORTHOPEDIC SURGERY.

ABSTRACTS BY JOHN RIDLON, M.D.

Barwell (R.) on Lateral Curvature of the Spine.—Lateral curves receive from the direction of their convexity the name of right or left, and they are called dorsal or lumbar according to the region they affect. Most curves are double or S-shaped; but in some cases the upper, in others the lower, bend is the original evil, and is named primary dorsal or primary lumbar. The other curve, called the secondary or consecutive, is an addition forced upon the primary curvature, probably by the necessities of balance. Other varieties, however, are not uncommon. Combined with the bend in the spine is always rotation of the vertebræ, in such sense that the anterior faces of the vertebræ always look towards the convexity, and the tips of the spinous processes towards the concavity, of the curve. A spinal curve, when visible through the clothing or detectable by a dressmaker's tape measure, is already sufficiently advanced to render treatment certainly prolonged, perhaps doubtful. The earliest signs of curvature are very subtle, only noticeable to the trained eye, and even by many of the profession, not much accustomed to this special examination, are little understood. It will therefore be well to give a description of these earliest symptoms.

Firstly, of lumbar curvature, convex—let us assume to the right. The patient is placed with the back directly opposite a good light; the lower hair must be disposed on the head; all the clothing removed to a level with the great trochanters. The surgeon, sitting behind her, feels that the knees are quite straight and the feet close

[3] *Brit. Med. Jour.*, Dec. 3, 1887.

together; then, placing his forefingers on the crest of the ilium at the side outline, notes if one be higher than the other. On the convex side the side outline just above the ilium is full and rounded, while on the concave side the constriction of the waist is marked by a deeper excavation; the angle between the thoracic part and the iliac part of the body is on the right very obtuse, on the left much more acute; if the arms can be brought to hang evenly and perpendicularly from the body the triangular interval between them and the trunk is larger on the left than on the right side. Feeling for the line of the spinous processes, the surgeon may thus early find them still quite straight, because their rotation to the convex side will have compensated for their lateral deviation; but on feeling the parts on each side of that line he will find the muscles much harder on the convex than on the concave side.

The particulars of the treatment are as follows: A higher shoe on the convex than the concave side, and a wedge of wood to place on the chair when sitting, the base of the wedge being to the convex side. In more developed cases a *loin bandage* is used. It is in each instance made of coutil or moleskin, from a pattern which I myself cut to the patient's figure. The *lateral swing* and the *loop girth* are also advised. —*London Lancet*, June and July, 1887.

Clay (A.) on Lateral Curvature of the Spine.—Lateral curvature is much more frequent in the female than in the male, and usually occurs between the ages of ten and twenty-one, though it may present itself either earlier or later than this. I am convinced that curvatures would be found quite as commonly, if not more frequently, amongst the poor, as in the well-to-do classes. The most common condition is that of a dorsal convexity directed to the right, and a lumbar to the left; but the opposite condition occurs in the proportion of about one to eight. The causes may reasonably be divided into predisposing and exciting: debility (however produced) and rickets coming under the head of the former, and faulty habits and one-sided work constituting the latter.

Generally there are no subjective symptoms of commencing curvature beyond the feeling of lassitude, a sense of fatigue after even moderate exertion, and the relief gained by recourse to frequent sitting or "lolling" postures, or the recumbent position. As a rule the spinal deflection begins in a very gradual manner, and without at all attracting the notice of the patient or her relatives, until some obvious deformity presents itself. Pain may be present at the outset, but more frequently no complaint of pain is made until the distortion has advanced to a distressing stage.

In many cases little or no deformity can be noticed in the erect posture; consequently the patient should be directed to bend forwards with the arms hanging directly down in front. By this method the scapulæ are drawn forwards and the ribs posteriorly are left uncovered, when their angles and adjacent parts are found to be abnormally convex, and on a higher level on the side corresponding to the dorsal curve. This increased convexity causes the well-known prominence of the shoulder. When the patient is in the stooping position it will be found that the lumbar muscles protrude on the side opposite the dorsal curve. At the front of the chest the same inequality in the heights of the shoulders is noticeable, and in subjects of the more common deformity of the right dorsal curve, the left side projects unnaturally forwards, the ribs are lowered, and the breast, retaining almost entirely its normal relation to them, is found on a lower level on this side than on the right. The local treatment of incipient curvature brings under consideration: *Exercise, Rest, Local Stimulants, and Supports.*

I usually order a *systematic* course of dumb-bell exercise. The weight of the dumb-bell should be carefully regulated to the strength of the patient. After a time manual suspension on a horizontal bar. The spinal muscles can be improved by the patient lying prone on the table or floor and raising the head and upper part of the trunk as high as possible from the ground without moving the pelvis. While in the same position, the legs, one at a time, should be lifted from the floor or couch. Another exercise is "dry swimming."

Entire recumbency, that is, lying down for a period of *twelve* to *eighteen* months, has many advocates; but it clearly has the effect of weakening already feeble muscles. After every exercise recumbency is imperative, but this should not be prolonged for more than an hour.

Local stimulants in the form of "muscle-stroking," "muscle-beating," cold douches, and liniments are very useful aids to the

treatment. Spinal supports, as a rule, must be strongly interdicted in these incipient cases, but where the patients are compelled to go about their work in the usual way, and where there is much pain, a poro-plastic jacket or a light divided Sayre may have to be used. The patient must be firmly told that these jackets are not curative, and that the sooner they are left off the better. The cuirass should be taken off at night, and when going through the prescribed exercises.

The success of the treatment depends upon two factors: one being the amount of structural alteration; the other the intelligent capacity of the patient to modify the perverted muscular sense. The medical man should endeavor to replace his patient in the normal position; and in the more exaggerated cases this may be aided by certain positions of the arms—most improvement being generally obtained by directing the right arm vertically upwards, and the left arm at right angles to the body. This is called the "key-note" position, and is that position which should be maintained while performing most of the exercises.

The long list of mechanical contrivances for this condition is not only a reproach to surgery, but a source of mischief and embarrassment. Extension couches, thoracic cradles, slanting seats, and other such things are wholly unnecessary, and should be put aside as being mostly useless and often dangerous by retarding or preventing a cure. From the use of the so-called spinal supports I have seen nothing but harm result.—*Birm. Med. Review*, Oct., 1887.

Dennis (F. S.) on Rickets; Its Treatment by Osteotomy.—Rickets is a disease essentially of childhood. I have found the average at which the disease may be considered at its height to be about three years. These children walk late in comparison with healthy children, and attain considerable size and weight. The disease is found among the children of the poorer classes, who live in dwellings which are ill-ventilated and improperly drained, and where sunlight and fresh air have no admittance. Improper feeding leads to indigestion and to want of proper assimilation, and hence the child suffers from malnutrition. It is a remarkable fact that rickets seldom is seen in a child who has nursed from a healthy mother's breast.

MacEwen's operation of osteotomy is described in detail, with slight modifications, and is the treatment chosen by the author.—*Gaillard's Med. Jour.*, March, 1887.

Parker (R.) on the Treatment of Knock-Knee and Other Deformities of the Lower Limb.—The milder cases of knock-knee are among the easiest to treat successfully. The speedy and easy straightening that often results from clumsy and ill-applied apparatus shows plainly that there is a pretty strong tendency in the human limbs to grow straight if the force that distorts them be even slightly counteracted.

Deformed lower limbs are amenable to mechanical treatment, with or without cutting operations, or violent correction, to sever the bones or tendons, irrespective of deforming cause, which is better kept in the background when treatment is considered. Slight knock-knee may get straight on taking a child off his legs. Splay-feet and knock-knee are often combined; and a correction of the splay-foot by suitable alteration of the boot leads to the desired end and to a disappearance of the knock-knee as well. The indirect curative device here implied consists in raising the inner edge of the heel and sole and sloping them off towards the outer side.

The are very few cases of simple and not excessive knock-knee in children that cannot be straightened in Thomas' knee-splint, of which the caliper variety generally suffices when fitted with a single leather bandage sewn to the bar at one end and tied by a couple of laces at the other.

A good deal of labor is involved, however, in the adjustment and straightening of bad cases, in which I now commence with osteotomy or simple fracture, bringing the thin joints of the limb into the same straight line with Thomas' long knee-splint, keeping the patient in bed as one would do in cases of fracture by accident, until union of bone and healing of wound, if any, be complete, and then substituting the caliper splints fitted with a leather bandage, with the erect posture and walking exercise.

When the three joints are in line, and the limb efficient, I do not commonly interfere with deformity on account of its mere looks, but generally advise it to be left alone. Cases of bandy-leg and other rickety bends of the tibia I treat by forcibly straightening, where one of the three joint

of the limb is out of line with the other two.—*Liv. Med.-Chi. Jour.*, Jan., 1887.

Widerhofer on the Ætiology and Treatment of Rickets.—We must still nowadays define the word "rickets" by stating that it means that disturbance of development of the bone in which the salts of lime are not deposited in the new-formed elements of the cartilage, in the so-called osteogenetic tissue. Why these salts are not deposited is a matter of dispute which is not yet completely decided. When we administer the phosphates and carbonates of lime in abundance, almost the whole quantity taken by the children is found in the stools and the urine, and the children continue to be affected with rickets.

Dr. Kassowit started from the standpoint that the rickety process was due to a morbid vascularization of the osteogenetic tissue; hence, more or less an inflammatory vascular process, by which rickets was caused. Practitioners have generally pronounced themselves in favor of the therapeutic success which was derived from this explanation; but the histologists have not agreed that we have to do with an inflammatory process.

From the clinical and practical points of view we know that children who are ill and improperly fed easily become affected with the disease; but that some such cases do not become so affected. Children who live in moist and ill-ventilated dwellings are very subject to rickets. Children affected with hereditary syphilis are all, almost without exception, taken ill with rickets later on.

Respecting treatment, besides dry dwellings, fresh air, and good food, it is advised to administer cod-liver oil, with or without phosphorus.—*New Orleans Med. and Surg. Jour.*, Oct., 1887.

Clubbe (C. P. B.) on Osteotomy for Bent Tibiæ.—During the last two years I have operated on nine children, and both legs were straightened in every case but one. In these cases, the tibia has been divided seventeen times without any untoward result, for every child got well without a bad symptom.

The author uses a small saw, preferring it to the chisel, and believes that the "bone-dust" does practically no harm.—*Australasian Med. Gaz.*, Oct, 1887.

Moncorvo on Hereditary Syphilis and Rickets in Brazil.—In an extensive practice in Rio de Janeiro and the province of that name, he believed that hereditary syphilis furnishes sixty per cent. of the cases of infantile disease. It is the most important factor of infant mortality, either directly or by the severity which it imparts to the diseases of children, and rickets makes its appearance in forty-five per cent. of the children that come under his observation. More than two thirds of the rickety children in his practice show signs of syphilis, and it is rare to find an hereditary syphilitic child whose bones are not deformed by rickets.—*Medical Record*, Sept. 10, 1887.

Furey (Geo. V.) on Rachitis.—The author mentions having met with a comparatively large number of more or less well-marked cases of rachitis in a rural location (Sunbury, N J.). The treatment recommended is saline baths at bedtime; out-door exercise, and fresh-ground malt, given as abundantly as practicable. Plenty of good milk, fish, flesh, and fowl, if the child be old enough to eat and digest it. Avoid the temptation to give medicines.—*Med. Register*, Dec. 24, 1887.

Brown (Dillon) on Osteoclasis for the Correction of Deformities.—Osteoclasis is useful for the correction of: 1—Rachitic deformities of the extremities. 2—Deformities following badly united fractures. 3—Articular deformities resulting from bony anchylosis. 4—Deformities following old dislocations. 5—Certain obstinate forms of club-foot. For bow-legs, manual osteoclasis can be practised in only a limited number of cases. The operation, however, is any thing but a thoroughly safe one.

Without doubt a certain, and possibly a large, proportion of rachitic deformities of the extremities recover without either mechanical or surgical interference. On this account I would not apply the clumsy mechanical supports in very young children unless the deformity was very much exaggerated, but depend upon the general treatment and frequent daily attempts at correction with the hands.

As soon as the bones become eburnated, operative interference is necessary to correct the deformity, and it seems to me that osteoclasis is much preferable to osteotomy. It is just as effective, besides meeting the same indications in a safer and simpler manner. It has been practically demonstrated that the great but temporary pressure brought to bear on the soft tissues by

the osteoclast does no harm, and it has been repeatedly shown, in experiments on the cadaver, that you have complete control over the point of fracture.

For bow-legs I prefer Rizzoli's osteoclast as modified by Dr. A. T. Cabot, of Boston. Sharp curves, so near the joint that Rizzoli's instrument cannot be used without the danger of separating the epiphysis, should be corrected by some modification of Robin's osteoclast or by an osteotomy. The author reports eight cases of osteoclasis for bow-legs. The patients were all about four years of age. The curves of the tibia represented every variety—lateral, antero-lateral, and anterior. There was increased lateral mobility of the knee-joint in every case. No accident followed the operation, and the result, both immediate and ultimate, was excellent. There has been no return of the deformity, although the patients were allowed to run around in six weeks after the operation without any mechanical support.

The principles which guide me in the treatment of these cases are :

1. In children under two years of age, in which the deformity is not exaggerated, the expectant plan, possibly with frequent daily attempts at correction with the hands.

2. In older children, in which the bones are yet soft, some form of mechanical support.

3. As soon as the bones become eburnated, osteoclasis or osteotomy.

4. Osteoclasis is to be preferred in all cases of deformity near the middle of long bones, in a large proportion of cases of knock-knee and other deformities near the joints, and only rarely in cases of bony anchylosis and club-foot.—*Med. Record*, Dec. 3, 1887.

PATHOLOGY.

Nakano (K.) on a Curious Disease called "Head Drop."—The author, in the November number of the *Sei-i-kwai Medical Journal*, describes a disease, bearing the above popular name, which is apparently peculiar to Japan.

An attack is preceded for some hours by mental uneasiness and headache. Rather suddenly the head becomes so heavy that it cannot be held up and it droops forward. At the same time the gait becomes unsteady and weak. Dull pain in the neck, congestion of the conjunctiva, dilatation of the pupils, and diplopia are generally present. The tongue becomes stiff, the speech slow, and swallowing difficult.

The urine is colorless, of high sp. gr., has a white sediment, sometimes contains sugar, but has little or no urea and no albumen. In severe cases one of the legs may suffer from motor or sensory paralysis or both.

It seems to attack young adults mostly, and all the cases seen by the author were farmers. Most victims are attacked when hungry, and an attack can be aborted by the immediate ingestion of a large meal. The attack lasts from a few hours to several weeks, but seems never to be fatal. Relapses are apt to occur, but during the remission the health seems perfect.

The people look upon it as contagious, and it does often attack all the members of a family in succession.

The author looks upon it as an obscure malarial affection of the central nervous system, as it occurs synchronously with, and in the same localities as, other malarious diseases, but it does not in all cases yield to anti-periodic treatment.

Morel-Lavallée (A.) on a Case of Intra-Nasal Chancre. — A man of 39 presented himself with an indubitable syphilitic roseola. All common sites for chancres were examined and found healthy.

All his glands were enlarged, the submaxillary glands especially so, particlarly on the left side.

A careful examination revealed an erosion situated just within the left nostril and encroaching somewhat upon the septum. It was irregular in shape and had a grayish surface with small red points and a tendency in certain parts to bleed. The part encroaching upon the septum alone seemed to be the seat of some induration.

The patient denied suspicious intercourse, but confessed having handled a questionable woman, and was also given to "picking" his nose.—*Ann. de Dermat. et de Syph.*, Nov. 26, 1887.

Natier on Adenoma of the Velum Palati.—The patient was a healthy woman of 44. For eight or nine years she had been conscious of the growth of some sort of a tumor in her throat. For four years it caused no interference with respiration, voice, or deglutition. About that time her voice became nasal and she had a

sense of fulness in the throat. In sleeping she was obliged to lie on the right side to breathe freely, and she began to sleep with the mouth open. There was slight impairment of appetite, and emaciation but no cachexia.

The growth was about the size of a pigeon's egg, with the small end forwards, and occupied the right half of the soft palate, extending forwards as far as the canine tooth on that side. Its surface was bosselated, but covered with smooth, healthy mucous membrane, and it was hard and lobulated to the touch. There was not the slightest trace of glandular enlargement about.

The tumor was easily enucleated, the hemorrhage checked, and the lips of the wound approximated by five sutures.

The patient did uninterruptedly well, using all the time, as a mouth wash, a 1 to 1,000 thymol solution.

Under the microscope, the tumor was seen to consist of diffuse adenoid tissue.—*Rev. Mens. de Laryngol.*, etc., Nov. 1, 1887.

Ruault (A.) on a Case of Primary Circumscribed Œdematous Epiglottiditis.—The patient, a woman of 26, had from an early age a very sensitive throat, and had had many attacks similar to the one described, only of shorter duration, and apparently brought on by exposure to cold.

She complained of pain during the second stage of deglutition, whether the material swallowed was solid or liquid food or even saliva, and also of a permanent disagreeable feeling as if there was a "ball in her gullet." This sensation as of a foreign body interfered with her sleep, but never caused strangulation or suffocation. There was no cough, nor any pulmonary signs, and the general health was excellent.

On examination it was found that the laryngeal face of the epiglottis was entirely occupied by a roundish, hemispherical tumor with a shiny, brilliant surface of a pale-rose color, seemingly translucent, and furrowed by some varicosities.

The tumor did not invade the larynx, was yielding to the sound, and was not painful on pressure.

The anterior surface of the epiglottis was perfectly normal.

It appeared to be an exceptionally large cyst of the epiglottis. Such being the conclusion arrived at, it was incised with scissors, but, to the surgeon's astonishment, only a few drops of bloody serum exuded. The theory of a cyst being abandoned, on two separate occasions, multiple punctures with the galvano-cautery were practised, and complete restoration of the part to its normal condition followed.—*Rev. Mens. de Laryng.*, etc., Dec. 1, 1887.

Arloing on a New Gas-Forming Bacillus.—During the past year Gayet had occasion to puncture the anterior chamber of an eye which had suffered traumatism. From the wound thus made there issued sanious matter and gas. A second puncture failing to relieve the condition, the eye was finally enucleated.

On examination the sanious fluid was found to contain the bacillus septicus, or septic vibrio, which Chauveau and Arloing have found in gangrenous septicæmia, and which has been thought to produce the gas in the connective tissue under such circumstances.

After a thorough examination of the bacillus in question by the author, it is found to differ from the bacillus septicus in several very important particulars: in its morphology; its solution; the soil favorable to its propagation; and its pure culture seems to be relatively benign in man.—*Lyon Méd.*, Dec. 25, 1887.

Matthieu (L.) on Rupture of the Stomach, Due Probably to Over-Distention by Gases.—Some time since I was summoned to see Mrs. C., aged 56. I found her in great agony, the pain being located in the epigastric region. She said she had vomited, and belched up a quantity of wind. In attempting to reach for the vessel under the bed, she was compelled to bend herself forward in order to get it. While in this strained position she felt, all of a sudden, a great pain, and something give way. The woman had been a victim of chronic gastritis. I gave at once ¼ gr. of morphia hypodermically and promised to see her in a few hours. When I saw her again, about six hours afterward, there had developed in the umbilical region a soft, painless, circumscribed tumor, about as large as a child's head, and having to the touch a sensation of gas in peritoneal sac. Ruduction by manipulation and bandaging was tried but without success. Twenty-four hours afterward temperature was 104° F., pulse 126, and a great deal of passive congestion of head and face. The patient died on the third day. Autopsy revealed a rent of about two inches at

pyloric end of the stomach.—*Western Med. Reporter*, Nov., 1887.

Ormerod (J. A.) on Partial Perforation of Scull-Cap in Cerebral Tumor.—Scattered over the frontal and parietal regions over both sides, were about thirty holes, varying in size from a quarter of an inch in diameter downwards, extending through the inner table, and in some instances almost completely perforating the skull. Actual perforation was observed during life over the right eye; this perforation was enlarged in the course of a surgical operation for the removal of the tumor. The dura mater exhibited clean-cut perforations corresponding to those in the skull. There was roughening of the internal table between the perforations, and in some places general thinning of the skull. The holes were seen, *post mortem*, to be caused by small soft tumors sprouting from the surface of the brain. The large (surgical) hole was blocked by a slough where the tumor had been removed, and behind this the frontal lobe was entirely softened. The choroid plexus of the ventricles was infiltrated with pus, which, tracking into the left temporo-sphenoidal lobe, formed a a large abcess there. The patient was admitted under Dr. Andrew at St. Bartholomew's with general symptoms of cerebral tumor. Some left-sided paralysis appeared soon after. He became unconscious, and remained in this state for over a year, being kept alive by nasal feeding. Shortly before death a perforation occurred over the right eye, and it was through this hole that the tumor was partly removed.—*Br. Med. Jour.*, Dec. 24, 1887.

MISCELLANEOUS.

Maire (L. E.) on the Effect of Camphor on the Salivary Glands.—Trousseau, in his "Treatise on Therapeutics," vol. iii., mentions the fact that camphor, when taken with a preparation of mercury, lessens its anti-venereal power, also the salivation. This is the only reference to this peculiar effect on the salivary glands, of camphor, that I have been able to discover in any work on materia medica or therapeutics that I have consulted.

Illustrative of this peculiar action I wish to relate the following case: March 1, 1885, Mr. D., who had been imbibing rather too freely, was struck with a beer glass on the left side of his face, causing an ugly gash, severing the transverse facial artery and Steno's duct. He bled profusely at the time of injury. I first saw him on March 5th, five days after injury. I found eversion of the wound which was granulating, also coursing down the cheek from a small opening in the wound, was quite a stream of saliva. This was so profuse as to keep his shirt and coat constantly saturated.

There was also considerable swelling of the tissues around the wound. I ordered the patient to move jaws as little as possible, also a local application of ungt. camphoræ, made by dissolving gum camphor in hot cosmoline in the proportion of ʒ ss to the ℥ j.

Instead of getting this at the drug store, he was given a carbolated ointment to use topically, which he did all next day; on the night of the sixth the saliva ceased to flow, but the cheek became enormously swollen, so much so as to prevent the passage of saliva through Steno's duct by pressure. This condition of affairs continued until the evening of the seventh, when I was called to see him. I ordered the camphor ungt. to be applied until I should call again; I left the patient in a very uneasy condition owing to the uncomfortable swelling. The next day I found that shortly after applying the camphor ointment the swelling began to decrease and a slight discharge of the saliva made its appearance. This was succeeded by a great reduction of the swelling. I ordered fluid food so as not to move the jaws, as this always increased the flow of saliva; also a continuance of the camphor.

On the next day I found the swollen gland and cheek had been reduced considerably, and that very little saliva was escaping from the fistulous orifice. The wound had all the appearance of closing very soon, which it did on the next day, as on this day the swelling totally disappeared, as did also the flow of saliva, and I considered my patient permanently cured. Cases of salivary fistulæ are usually cases calling for surgical treatment.—*American Lancet*, Jan., 1888.

Whitwell (J. R.) on the Etiology and Treatment of Neuralgia.—Of the local methods of treatment, such operative methods as excision and division of the nerve sufficiently explain themselves.

Stretching the nerve and acupuncture seem to act in the same way, probably by causing a solution of continuity in the sheath, and thus relieving tension, and diminishing the swelling of the nerve. As regards stretching, however, Callender considers that "it is probable that the stretching is of use by numbing the nerve for a short time." If this be really true, the natural explanation would be that the sensory irritation resulting from the hyperæmia would for a time cease, and on its cessation the reflex dilatation of the blood-vessels would also be brought to an end. Electricity, again, in common with belladonna, and heat or cold locally applied, would contract blood-vessels. Belladonna, volatile oils, thymol, and menthol, also chloroform, not only contract the blood-vessels, but also diminish the sensibility of the part, while aconite locally applied acts purely as an anodyne.

Of the external and remote methods of treatment, counter-irritation over the upper part of the dorsal spine, which apparently does good in some cases, must be mentioned, though perhaps somewhat difficult to explain, unless possibly it has some action on the sympathetic vaso-motor fibres which emerge from the cord about this level in the anterior roots of the lower cervical and upper dorsal nerves (Foster). Ligature of the carotid is an eminently successful, though somewhat heroic treatment, and has been very successfully employed by Dr. Patruban in many cases of severe neuralgia—this, of course, acting directly on the blood-vessels, the idea of the operation having originated from the relief obtained in some cases by simple pressure on the carotid.

Of the internal treatment of neuralgia the substances used naturally fall into four groups.

1. Those which contract blood-vessels, such as strychnia, atropia, and its allies, bromide of camphor, digitalis, ergot, volatile oils such as turpentine, chloride of ammonium, and quinine, though certain of these also have a specific action on sensory nerves in addition.

2. A second group consists of bodies which act as general tonics, such as quinine, iron, strychnia, phosphorus, and arsenic. The experience however, of arsenic and phosphorus seems to indicate that they have some more direct action than the simple tonics.

3. A third group consists of simple anodynes or sedatives, such as bromide of potassium. This, however, like chloral, diminishes the pulse tension, and in addition diminishes reflex excitability by depression of the peripheral sensory filaments. Other drugs, such as cannabis indica and morphia, seem to act as simple anodynes.

4. The fourth group consists of the usual tell-tale drugs, which are always appearing, and of the action of which no very apparent explanation can be given. Amongst these gelsemium sempervirens is a prominent member, and probably also arsenic and phosphorus.

It appears, then, that there are symptomatic, pathological, ætiological, and therapeutic reasons for believing that the blood-vessels are at fault in cases of neuralgia, and therefore, on this view, it seems necessary to consider true neuralgia as a sympathetic neurosis, affecting certain tracts of cerebro-spinal nerves, resulting in simple dilatation of the vessels of these nerves, brought about by unknown causes, or by reflex irritation, or possibly by the specific action of certain poisons in the blood.—*Edinburg Med. Jour.*, Dec., 1887.

Pinkham (J. G.) on a Case of Poisoning with Oil of Gaultheria. — A young woman, three months pregnant, took, to produce abortion, an ounce of oil of wintergreen. The symptoms summarized were: Distress in the head, profuse perspiration, pain in the stomach and bowels, purging, diuresis, with frequent painful, and at the last involuntary, micturition, abolition of sight and hearing, general convulsions, tonic spasms of the flexors of hands and feet, great depression of the heart's action, rapid respiration, and death in fifteen hours. On post-mortem examination there was found persistent spasm of hands and feet, great irritation of the gastro-intestinal mucosa, a black, fluid state of the blood, and congested kidneys.—*Bost. Med. and Surg. Jour.*, Dec. 8, 1887.

Poisonous Mackerel.—Several cases of poisoning from unwholesome mackerel have been observed during the past fortnight in London. The most serious occurred in Bayswater, where three members of a gentleman's family ate some of that fish for breakfast last Friday week. In a few hours two of the three had choleraic symptoms, and then speedily recovered.

The third, a robust young man, was seized a day later with very severe gastro-enteritis, and was in great danger for a week, the original complaint being complicated by peritonitis.

A very severe case occurred in Kensington. A man, aged 40, ate a piece of mackerel about four weeks ago. Severe diarrhœa followed in a few hours, and then gastro-enteritis and general peritonitis, with the worst symptoms of acute obstruction. During the course of the third week an abscess formed and burst into the intestine; since then the patient has steadily improved. The young gentleman to whose case we referred last week appears to be slowly approaching convalescence. The cervical glands enlarged last week, but the swelling has subsided. The temperature has never exceeded 100.2° F.; the symptoms of intestinal obstruction have entirely disappeared. Emaciation and debility are strongly marked. The danger of eating mackerel out of season has long been admitted. It is unfortunate that it is not more generally known; nor can youths and men who have no experience in housekeeping be expected to keep a calendar of seasonable articles of diet stored in their memory. Most of the *Scomberidæ* or mackerel tribe are more or less poisonous at certain seasons of the year; this phenomenon is particularly the case with the gigantic oceanic mackerel, the albacore, and bonito. In both cases the patients were, on several occasions, violently delirious at night.—*Br. Med. Jour.*, Dec. 10 and 17, 1887.

Wilson (J. P. A.) on Fish-Poisoning.—A number of Malays partook of a curry made from a fish called by them "*ikan buntol*," corresponding to the description of the tetraodon, or globe-fish. When seen by me several hours after, the symptoms complained of were giddiness, inability to stand, loss of power in limbs, impaired sensation in lips, dry feeling in mouth and throat; nearly all had vomited and were rallying. One case ended fatally, that of a young lad who had eaten heartily of the curry. I saw him eight hours after he had taken the food; he was semi-conscious, but could be roused to answer questions, and he complained of loss of power in his limbs, and weakness. Pulse weak and thready, stomach irritable. I ordered stimulants and mustard blister. On returning in two hours' time he was almost comatose; his friends had discarded the medicine after first dose, and were using charms and propitiating the evil spirit. I learned that he died shortly after (twelve hours after taking food). One woman, who had also eaten heartily, but had vomited freely, remained in a half-conscious state for about twenty-four hours, and then recovered.

The fish is well known to both Chinese and Malays, who say that only an adept can prepare it for use. The poison is said to be in the gall-bladder, which must be carefully extracted. The fish itself is quite wholesome, but on account of its poisonous nature is thrown away by the fishermen. It has a peculiar spiny skin, which it erects, and can distend itself with air; it then floats stomach upwards.—*Br. Med. Jour.*, Nov. 5, 1887.

Howard (G. W.) on Death Caused by a Skunk Bite.—On the 26th of last April a little boy, eight years of age, was brought to my office to have three small wounds treated, caused by the bite of a skunk. The wounds were slight, one being at the end of the forefinger, through the nail; the other two were above the right eye and in the brow. Suffice it to say they appeared to make good recovery.

On the 26th of May, just one month from the day the wounds were inflicted, I was called to see the boy.

On examining the patient I found the case as follows: The wound on the finger had become inflamed and painful; there was excessive restlessness, a peculiar sad expression of the countenance, slight redness of the conjunctiva, frequent attempts to vomit, which was attended by slight viscid matter from the throat. The fauces, on examination, were red and slightly inflamed, and there was complete inability to swallow. The temperature in the axilla was 102°, pulse 140, and the child complained of severe pain in the head.

I diagnosed the case hydrophobia. The pupils being largely dilated, and the little fellow not having slept for two nights, attempted to give a dose of morphine. Finding the attempt to swallow caused some spasms in the muscles of the throat, I then gave a dose dry on the tongue, and ordered fifteen grains bromide potash dissolved in warm milk, to be used as an enema. The above treatment I directed to be kept up until the child could sleep. After that I

prescribed quinine, to be given by enema, with warm water and milk, to sustain the system if possible. The treatment, although carried out, was of no avail; the little fellow continued restless and wakeful, although perfectly rational, and died that evening at six o'clock.

A few hours before death there was a decided, clear, and distinct odor of the skunk perceptible on the child. The mind remained rational to within a few moments prior to death. Others near here have been bitten by animals of the same species with no bad results.

My opinion, which I gave the family, was, that the skunk was enraged (being chased into the house by dogs), and the bite was more poisonous under such circumstances than when the bite was inflicted otherwise. Perhaps the time of year might also have had something to do with the virulency of the bite.—*Nashville Jour. Med. and Surg.*, Sept., 1887.

Pope (F. M.) on a Case of Vomiting of Gall-Stones.—L. H—, aged forty, married, was admitted on September 3, 1887. Her general health had been fairly good; she had never had jaundice. Two years ago she had an attack of "pleurisy and inflammation of the bowels," and a similar attack six months ago. For the last three months she has had occasional cramping pains in the abdomen. Her present illness began five weeks ago, when during the night she had violent pains in the abdomen, worse about the right hypochrondrium. The pain was unrelieved by pressure, and ease was obtained only slightly by a mustard application. The next day she began to vomit, and the pain became less violent. The vomiting has continued at frequent intervals ever since. She states that she is in the fifth month of pregnancy and has had several children.

In the right hypochondrium there is marked tenderness and a sense of resistance, but no tumor. Hepatic dulness not increased. The abdomen is slightly more tender than normally, but nothing more can be made out. There are no abnormal physical signs of heart or lungs. Urine: Sp. gr., 1010; alkaline; contains no albumen or sugar. Tongue furred thinly, and rather dry. Bowels not open for two days. Temperature, 98.4°; pulse, 70, feeble, regular.

On the day after admission she was still vomiting constantly. The vomit was green at times. No other change. On September 5th, two days after admission, the note was: Last night she had a considerable increase of pain, accompanied with slight convulsions and internal strabismus. She was not unconscious. Early this morning she vomited two gall-stones about five-eighths of an inch in diameter, with six or eight facets on each, and several smaller ones. The pain continued. She was a good deal collapsed. Temperature, 97°; pulse very slow and small; bowels not open. On the 6th she was in much the same state, and had vomited a few more small stones. On the 7th the bowels were freely opened, and the motions contained several gall-stones, one nearly three-quarters of inch in diameter. A few more small stones were vomited. After this she slightly improved, the vomiting almost ceased, and she began to take a little more nourishment; but on the 17th she had another convulsive attack and subsequent collapse, from which she was revived by hypodermic injections of ether. The vomiting never entirely stopped, and on the 24th diarrhœa set in. On the 25th the temperature was 100°, the highest since admission; she was rather delirious, took little food, and the diarrhœa continued. She gradually sank, and died at 7.20 A.M. on the 27th, twenty-four days after admission.

Necropsy, thirty hours after death.—On opening the abdomen nothing abnormal could be seen; no general peritonitis, no excess of peritoneal fluid. Uterus reaching nearly to umbilicus. On raising the liver the gall-bladder was found to be situated in a circumscribed abscess cavity, formed by the adhesion of the neighboring organs. The gall-bladder itself was in a sloughy condition, and several ragged openings existed at its fundus; some small stones had escaped into the cavity. There was a circular opening half an inch in diameter, with two well-defined edges, leading from the gall-bladder into the duodenum, at about three-quarters of an inch below the pylorus. The common and cystic ducts were patent; one or two small stones were found in the duodenum. The stomach was healthy, and there was no ulceration from the gall-bladder into it. The rest of the abdominal organs were healthy. The total number of stones vomited weighed 170 grains; those passed per rectum 103 grains.—*Lancet*, Nov. 12, 1887.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital.

VOL. V., No. 4. January 26, 1888. WHOLE No. 52.

CONTENTS.

	PAGE
Leading Articles	41
Therapeutics	45
Medicine	47
Surgery	49
Miscellaneous	51

LEADING ARTICLES.

On the Etiology and Contagiousness of Cancer.—In a preceding number[1] considerable prominence was given to this subject in an article entitled "The Etiology of Malignant Diseases." A paper[2] by Dr. G. A. Wheeler, of Castine, Me., was at that time freely quoted, in which he reports fourteen cases of malignant disease which occurred in his town within a radius of two or three blocks. The reporter of these cases was compelled to entertain a local theory of the causation of them, but he does not pretend to surmise what the etiological factor is.

Reference was freely made in the same article[3] to a paper by Dr. R. J. Hall,[3] in which he reports several instances of seeming contagion of malignant disease, and almost commits himself to the theory of a specific virus. In fact, he announces that he has found bacilli in one case of rapidly-growing non-ulcerated, large-celled sarcoma of the occipital region. Though few in number, the bacilli found were very distinct, only one being situated in each cell, straight, and apparently somewhat longer and plumper in proportion to their length than tubercle bacilli.

Concerning the contagiousness of cancer much has of late been reported. In a recent[4] editorial article the *Medical Press and Circular* says:

"Whether cancer is or is not contagious is presumably a question which, in the present state of our knowledge, it is premature to discuss. Certainly the consecutive appearance of the disease in the members of two or more families living in one house is not by any means conclusive of its contagious character, neither can the disease be necessarily regarded as contagious when it attacks a man and his wife, the one on the penis, the other at the uterus. The causes of cancer, at least those conditions which are put forward as the causes, are so numerous and varied that it is quite possible upon these grounds to account for the consecutive appearance of the disease in persons residing under the same roof, without being compelled to attribute its development to the questionable factor of contagion. Moreover, before the contagion theory can have any weight as an element in the transmission of cancer, an extensive process of exclusion of all other possible causes of the disease would have to be proved. When a man and his wife, each of whom has reached the age at which cancer is most rife, develop the disease in situations which are especially prone to malignant degeneration,—and, indeed, with every other circumstance favorable for its occurrence,—we have probably much more likely an instance of coincidence to deal with rather than one of contagion. With reference to the consecutive appearance of cancer in the members of more than one family in a house, a correspondent has supplied the following details: A man of elderly age, his wife, and a grown-up daughter lodged in the upper part of a

[1] MEDICAL ANALECTIC, Jan., 1886, p. 20.
[2] *Bost. Med. and Surg. Jour.*, Dec. 24, 1885.
[3] *Annals of Surgery*, Dec., 1885.
[4] Dec. 7, 1887.

tenement, and on the floor below there lived two elderly women. One of the latter was found to be suffering from carcinoma of the uterus. Some months afterwards the man developed a scirrhous growth in his neck, which grew rapidly and shortly killed him. Not long after his death his wife complained, and was found to have epithelioma of the os. She died also somewhat quickly from her disease. The daughter, who attended both to her father and mother, was not affected. In regard to this case, it may be observed that there is no evidence whatever of any contagion, and yet in one house three persons were found to be victims of cancer nearly at the same time. Although it is possible that cancer may be contagious, there is, we contend, no evidence at present that this is the case; at all events, no evidence which can be considered trustworthy, and time alone will only be able to show whether suspicions which have lately been excited in this direction have any foundation in fact."

Of a similar opinion is undoubtedly Mr. L. Nicholls, who reports [1] eleven cases dying of cancer in his practice in less than five years, and concerning them he says:

"The discharges from some of these cases were incessant and extremely offensive, in spite of the utmost cleanliness, and not only the rags, but the houses, were saturated with what I may perhaps be allowed to call 'cancer smell,' strong carbolic acid lotion and other disinfectants being constantly necessary to enable the inmates to remain with the patient. In each of my cases, husbands, relatives, and nurses are all at the present time in perfect health. Some of them certainly complained occasionally of the smell going down their throats and 'settling on their stomachs,' as they called it, which was not surprising; but these symptoms readily yielded, at my suggestion, to a strong glass of brandy and water."

Many facts, however, go to prove that we as yet know very little about the transmission of malignant disease. Dr. James Adam reports [2] the following interesting facts:

"A member of the medical profession married a lady who was subsequently found to labor under mammary and uterine cancer, from which she soon died; not long afterwards the gentleman himself, who had previously been healthy, developed symptoms of cancer, which disease subsequently became localized in the stomach and liver. Before his death he again married, and a year or so later the second wife was under the necessity of having both mammæ removed for cancer, in successive operations, and she sank after the second operation."

Mr. Thomas G. Laslett reports [3] the following cases:

"In 1883 a man was admitted into the Liverpool Infirmary suffering from epithelioma of the penis. He stated that his wife had died some time before of cancer of the womb, and he thought his complaint was something which he had contracted from her. He had never had any venereal disease.

"In March, 1887, I was called to Mrs. E——, and found her suffering from uterine cancer, which had evidently been in existence at least some months; it being, in fact, too late then for any operative interference. This woman's husband had had his entire tongue removed for epithelioma in November, 1885. Both she and her friends were quite unaware of any thing being wrong with the uterus. The cancer subsequently grew very rapidly, and she died in July last. The family history on both sides was good."

A case similar to the first is reported by Dr. Arthur Clemow [4]:

"A man died in the Liverpool Royal Infirmary in 1884 from cancer of the penis and secondary glandular disease, his wife having previously succumbed to malignant disease of the uterus."

Mr. R. Clement Lucas writes to the *Lancet* as follows: [5]

"The following curious instance of three different forms of cancer, occurring in three individuals living together in the same house, may some day receive an explanation other than that of mere coincidence. In 1881, and again in 1883, I operated on a gentleman suffering from rodent ulcer of the eyelid and forehead. He is still living, but with a return of the growth. In 1884 I operated on his wife for scirrhus of the breast; and during the past week a partner, who has always lived in

[1] *Lancet*, Dec. 3, 1887.
[2] *Lancet*, Oct. 15, 1887.
[3] *Lancet*, Oct. 29, 1887.
[4] *Lancet*, Nov. 26, 1887.
[5] *Lancet*, Nov. 12, 1887.

the same house with them, has come under my care with epithelioma of the tongue. I would not suggest that there is of necessity any thing more than accidental association between these cases, but the coincidence is the more interesting in that there is no blood relationship between them. Before one has learnt to attribute the ravages of cancer to the introduction of some external virus, one must have regard to the more apparent contributaries to its outbreak; and if asked as to these, I should give, in order, age, syphilis, melancholia, gout."

In the same journal of the same date Dr. Peter Eade narrates the following case:

"Some few years ago I was consulted by a married man respecting an irregular nodule which had appeared beneath Poupart's ligament on one side. This growth gradually increased and extended itself upwards into the iliac fossa, developing into an ordinary malignant tumor. The patient died at a not very distant date. There was no disease of the penis. Some few weeks later the wife of this patient consulted me for uterine symptoms of some considerable duration, and on examination I found her to be affected with extensive cancerous disease of the os uteri and vagina. She also died in due course. I had at the time, and have now, little doubt that the case was one of infection, and that the malignant groin tumor of the husband was due to absorption of the discharge from the wife's uterus; but whether through a temporary abrasion or through unbroken skin I could not tell. Such discharge doubtless contains the freed nuclei or nucleoli of the cast-off cells, and it is quite reasonable to suppose that these minute bodies may be capable of absorption under favorable circumstances, and so induce new growth in the spot where arrested.

"In this respect this case would differ from those in which secondary cancer is implanted, or communicated by abiding contact with adjacent tissue, examples of which latter are occasionally seen in concer of the peritoneum."

Of a rather more doubtful nature is the following instance of contagion reported by Mr. Walter Whitehead[1]:

"In 1864, when practising in Nottinghamshire, I was consulted by a laboring man, in middle life, suffering from extensive epithelioma of the lower lip, which eventually caused his death. He always attributed the cause of his complaint to drinking daily out of the same vessel as his father, who died a year previously from epithelioma of the lip. This, if nothing more than a coincidence, is momentarily interesting."

Three extremely interesting cases are reported[2] by Dr. Richard Budd:

"1. Some years ago a gentleman, who had spent many years in India, came under my care for cancer of the lip, for which he refused to submit to any operation. When he was confined to his bed a favorite little terrier was scarcely ever out of his room, and, as is the habit of such little dogs, frequently licked his master's lips. This dog died, before his master, of cancer of the tongue.

"2. A lady suffering from cancer of the uterus and vagina was nursed by a strong, healthy young woman of nineteen. She, in spite of my remonstrances, persisted in washing the rags which were saturated with the discharges from her mistress' wounds. Six months after the death of the lady this young woman was admitted into the North Devon Infirmary with a large mass of cancer in the axilla, and speedily died of the disease.

"3. Since I have been in practice in this small town five surgeons, all of whom had officiated at the North Devon Infirmary, have died of cancer. Such a mortality can hardly be conceived except on the supposition that the disease was communicated, at least to some of them, during their manipulations on patients suffering from cancer."

Dr. Wm. Groom,[3] in his inaugural thesis narrates the following incident:

"In a fen district, nine miles from any town or railway, and three from the nearest village, and with very few dwellings in it, three laboring men, all beyond middle age, living at separate houses and working together on the same farm, were each the subject of malignant disease within a comparatively few weeks of one another. Two of them had malignant disease of the stomach, and died at their own homes; the third had malignant disease of the œsophagus, and died at University College Hospital, where he was sent for surgical treatment. In the same thesis I wrote of the

[1] *Lancet*, Nov. 19, 1887.

[2] *Lancet*, Nov. 26, 1887.

[3] *Lancet*, Dec. 3, 1887.

possible part played by the lymphatic system in the reception and ultimate development of the particular cell or cell products, which probably is the form the contagious material takes."

Cases of seeming auto-inoculation of cancer in the same subject are not very rare. Dr. Alex. Williams reports [1] the following case:

"My patient was a female, about sixty years of age. On the inner aspect, and a little above the middle of her right thigh, was a cancerous tumor, about the size and shape of half an apple, ulcerated all around its apex, and very uneven and rough on its surface. On the left thigh existed a tumor precisely similar in appearance and site, though not nearly so large. The first tumor was said to have started in a "mole" or "wart," and the second manifestly grew from the site of an abrasion caused by the rubbing of the first tumor against the opposite thigh during walking."

At a recent meeting of the London Pathological Society [2] Mr. Jonathan Hutchinson assumed the connection between the continuous administration of arsenic as medicine and the development of cancer. In support of his thesis he evidenced several cases in which cancerous growths occuring in patients who had taken large quantities of arsenic, were therefore supposed to be induced by it. In one case a female child suffering from pemphigus was the victim, large doses of arsenic being succeeded by growth of a cancerous tumor over the iliac crest and under the skin of the thigh. Death took place at the age of twenty-five. The President, Sir James Paget, was of the same opinion as Mr. Hutchinson as to the tendency of cancer to follow large quantities of arsenic, and Mr. Eve entertained a like view. The opposite conclusion, however, was suggested by Dr. Edmunds and Mr. Harrison.

Be the cause what it may, statistics show an alarming increase in the prevalence of malignant disease. According to the annual reports of the Registrar-General in England,[3] the reported deaths from cancer in 1885 were nearly double what they were in 1867, concerning which alarming increase the *Medical Press* editorially says [3]: "But there is a silver lining to every cloud, and we are mindful of the fact that if the disease is increasing in frequency, so also is the skill of surgeons becoming more able to cope with the various forms of the malady. Cancer is not permitted nowadays to run its virulent course, with the surgeon standing by, without due counsel being taken as to its radical removal. In the case of external cancer the surgeon does not hesitate to use the knife whenever this is justifiable; while in the case of internal cancer, many forms are now treated radically which in earlier days would have been allowed to torture the victims to the bitter end."

But to return to the microbe theory of the disease. Sir James Paget says in his recent lectures "On Cancer and Cancerous Diseases" [4]: "I believe that micro-parasites, or substances produced by them, will some day be found in essential relation to cancer and cancerous diseases."

All the journals contain notices of Scheurlen's recent claim to have discovered *the* bacillus of cancer. The *Medical News* [5] editorially thus summarized his paper:

"Cultures were made, with the usual precautions, from ten mammary cancers, the medium employed being ascitic or hydrocele fluid sterilized for five days. Usually on the third day a growth, in the form of a colorless film, was seen on the surface of the serum, which became in time of a yellow-brown color. The cultures contained a short bacillus, 1.5 μ to 2.5 μ in length, which stained readily with the ordinary reagents, and showed spores. They could not be detected in the sections when stained, but in the fresh cancer juice, to the practised eye, they were readily recognizable. Six bitches were inoculated by injecting material from the cultures directly into the hinder breast gland, with the result of the formation, in about fourteen days, of a circumscribed tumor the size of a walnut. Two of the dogs were killed, one on the 28th, the other on the 30th day after inoculation, and each showed a small, solid growth in the fatty tissue of the gland, composed of epithelioid cells, in which could be seen the glistening spores of the bacilli."

Ballance and Shattock, published in the *British Medical Journal* of October 29th,

[1] *Br. Med. Jour.*, Dec. 17, 1887
[2] *Med. Press*, Dec. 14, 1887.
[3] *Med. Press*, Nov. 23, 1887.
[4] *Lancet* or *Brit. Med. Jour.*, Nov. 19, 1887.
[5] Jan. 7, 1888.

reported experiments [1] made to determine whether malignant new growths which have so many and close analogies to the infective granulomata have a micro-parasitic pathology. Cultures were made from twenty-two cancers, the greater number of which remained sterile, and when a growth did occur the organisms were the same as those described and figured by various observers as occurring in the healthy tissues. So many fruitless attempts have been made to inoculate cancer that it seems very remarkable to hear of definite tumors produced by the injection of the cultures. The question hinges on the precise nature and structure of these artificial growths; if really identical with the original tumors and containing similar organisms, the relationship will be as clear as in the case of Koch's bacillus and tubercle.

In all this parasitic furor the single but original observation of Hall, quoted in the beginning of this article, seems to have been overlooked. But not only this; Dr. G. Rappin,[2] of Nantes, wrote in 1881 an excellent thesis upon the bacteria of the buccal cavity, and since then has spent much time in highly scientific study and experiment in the wide field of bacteriology. As one result of his work he reported to the Anatomical Society of Loire-Inférieure some of his researches upon the micro-organisms of cancer, which were published in the *Gaz. Méd. de Nantes* in May and August, 1886. January 8th and February 25th, he addressed a communication to the Academy of Medicine, entitled "Researches on the Etiology of Malignant Tumors." In this paper M. Rappin details his experiments on cancers and sarcomas, citing also comparative experiments with benign tumors and normal tissues. The tumors examined by him were sixteen in number, of which five were cancers, eight epitheliomas, and three sarcomas; and in the cells and juice of all he found micro-organisms. His microbe is a diplococcus 1 μ to 1.5 μ long. He has cultivated it in various ways, and reports one positive result from inoculation. A rabbit, thus infected, died three months later of cachexia, presenting, near the point of inoculation, nodes which, under the microscope, had all the appearance of cancer, and were the seat of slight superficial ulceration. There were some small granules in the liver, and two mesenteric glands were enlarged. Portions of these organs transplanted into tubes gave rise to pure cultures of the original diplococcus.

[1] Quoted by *Med. News*, Jan. 7, 1888.
[2] *Union Méd.*, Dec. 10, 1887.

THERAPEUTICS.

Maternal Opium Habit and Infant Mortality.—In this journal for June, 1886, a case under the care of Dr. J. C. Carson, of Syracuse, of opium habit in an idiot boy was reported.

The mother of the boy was thirty-six years of age, and had been addicted to opium for eight years. The woman had had four still-births, and her fifth confinement was with twins, of which she was easily delivered. She died, however, in convulsions two days later. The twins could only be kept quiet by small doses of opium. In a month one died of convulsions and the other grew up an imbecile, with an opium habit which was not broken until his eighth year.

In the *Medical Standard* for January, 1888, Dr. F. B. Earle, of Chicago, narrates the following case:

"October 10, 1887, I delivered a thirty-two-year-old woman of a healthy ten-pound girl. The mother's extreme solicitude about the child led to the discovery that her three preceding infants had died within a few days after birth. Concerning these deaths the following history was obtained:

"The first child was born healthy, but pined away in two and a half days. The same phenomena were present in the case of the second child, which died three days after birth. The third child died under the same circumstances in four days after delivery. In regard to my own case, matters progressed favorably until the end of the third day. At this visit I was informed that the child did not sleep, and seemed troubled with colic. I noticed that the child seemed particularly sensitive to motion, looked pale and pinched and singularly prostrate. The milk had not appeared, and I instructed them what to feed the child, believing that it needed nourishment. Twelve hours later I was recalled in great haste, and arrived at the house in a few moments to find the child pulseless and cyanotic, and in five minutes it was dead."

It transpired that the woman had for

years been addicted to opium, and was at the present time taking from twelve to fourteen grains of morphine daily. By a former husband she had had two children which survived, their lives being saved, according to her account, by the use of "soothing syrup."

Editorially the *Medical Register*, of Jan. 14, 1888, says:

"X and Z were both daughters of a woman who ate opium to some extent, and both girls inherited their mother's appetite. X especially, becoming finally such an inebriate that she was repeatedly sent to an asylum, and being deprived of both opium and alcohol, to which she had recourse when opium was not obtainable, finally died after drinking a quantity of cologne-water for the sake of its coveted ingredient. In the meantime, she had children, several of whom died very shortly after birth, or at a very early age. Of this case, however, we know only by hearsay, and our information is consequently unreliable. Z, the other sister, is a person of our acquaintance, who uses opium. We should be afraid to state the amount used, as it is variable, and often said to be so large as to excite incredulity, it seeming impossible that such an amount could be taken without fatal results. However, Z has been pregnant three times to our knowledge, and we were informed that she had a fourth pregnancy, but do not know this to be true. Of the three pregnancies we know of, one resulted in a miscarriage, and the other two in the death of the children in one week and three weeks, respectively. The last child died in one week with symptoms similar to those of marasmus. It cried incessantly, a pitiful, weak cry, which nothing would still. Opium was not given the child, and it died in the course of a week. The wretched mother is again pregnant, expecting her confinement in this coming February."

Brunton (T. L.) on the Use of Strychnine as an Hypnotic.—In treating some cases of persons engaged in literary work who were suffering from sleeplessness and yet were obliged to have their brains perfectly clear during the day, it occurred to me that if I could convert the condition of over-tiredness into a condition of simple tiredness, the patient would naturally fall sound asleep without the use of any hypnotic. One can sometimes do this to a certain extent by giving some warm beef-tea or meat juice in water either hot or cold, or by giving a little alcoholic stimulant, such as whisky and water or brandy and water. It is probable that these substances have a double action, tending to dilate the vessels of the stomach and withdrawing blood from the head, as well as tending to exert what we may vaguely term a stimulant action on the nervous tissues themselves, without understanding what the exact nature of this stimulant action is. It occurred to me that as strychnine is one of the most powerful stimulants, if not the most powerful nervous stimulant that we possess, a small dose of it might have the effect of bringing the depressed nervous system up from the condition of over-fatigue to that of simple fatigue, and thus inducing sleep. I accordingly tried it, and was much pleased with the result. It acted exactly in the manner that I expected, and induced comfortable healthy sleep without any disagreeable effects next day. The way in which I have used it has generally been either in the form of the tincture of nux vomica in doses of 5 to 10 minims, or in the form of granules, containing $\frac{1}{100}$ of a grain of sulphate of strychnine in each. One, two, or more of these granules were given at bedtime, and the dose was repeated if the patient happened to awake within one or two hours afterwards.

I think it is very doubtful indeed whether strychnine would answer in other cases of sleeplessness than those arising from overwork or worry, and more especially from overwork. I have tried it, however, in a case of sleeplessness occurring in anæmia, but as the patient at her next visit complained that the medicine made her sleep rather too heavily, I am not quite sure how far mere suggestion may have played a part in affecting the result—*Practitioner*, Jan., 1888.

Freeman (J. N.) on the Use of Gelsemin in Obstetrics[1] and Diseases of Children.—In the intermittent fevers of children, particularly when convulsions are imminent, the author has used it with success. In the beginning of the attack he also employs the oleate of quinine endermically.

He considers it of great use in chorea, but cites no cures. He advises it in dysenteries with tenesmus, and in rheumatism it subdues pain, fever, and inflammation.

In children he uses tablets of gelsemin

[1] See MEDICAL ANALECTIC, Jan. 12, 1888, p. 24.

containing ⅛ gr. or less every two or three hours.

In obstetrics he uses it to relieve the irregular pains that precede labor and wear out the patient ineffectually; also to relax a rigid os, and to relieve after-pains.

In ovarian and uterine neuralgia, where no organic disease can be found, and in irremediable dysmenorrhœa, much relief follows its use.

The author gives the tincture in doses of from five to thirty minims for an adult, every two hours, and increasing to one fluid drachm, unless the peculiar effects are produced by a less dose. Three years ago he gave to a man, of about 50, and weighing over two hundred pounds, one-quarter-grain doses of gelsemin, in tablet triturates, every two hours, and after the third dose he complained of double vision and difficulty in walking.—*Am. Jour. Obstet.*, Jan., 1888.

MEDICINE.

Purpura Hemorrhagica followed by Gangrene.—In the *France Médicale* for Nov. 3, 1887, and in succeeding numbers, M. Martin de Gimard reports observations made upon two extremely peculiar cases of purpura hemorrhagica. The first case was a boy of eight. On admission the child presented, in addition to the ordinary symptoms of purpura, violet-colored œdematous swellings in various parts. In the face they appeared like enormous venous angiomata, located chiefly upon the right side and implicating the chin, lips, cheek, and upper eyelid. The right eye was closed by the swelling, but there was no disturbance of vision nor any lesion of the ocular conjunctiva. The mucous membrane of the lips and gums underlying the swollen lip was bluish and swollen. An œdematous condition, similar to that in the face, existed on the posterior surface of both upper extremities.

Later on large phlyctenules invaded the locations occupied by the œdema, and these in turn were followed by blackish sloughs which finally separated with a greenish, very fetid discharge. The slough of the lip destroyed the outer third on the right side, and exposed the gums and several teeth. Large sloughs occurred on the left shoulder, and lesser ones on the arm and forearm. Sloughing was present but less marked on the right side.

In the left upper extremity the sloughs laid bare the superficial veins and the olecranon, a part of which finally necrosed. Later the tendons and part of the muscular mass of the extensors came away. On the right side there were exposed the aponeurosis of the biceps and the superficial veins of the region.

During these severe symptoms the temperature rose but little above the normal. Antiseptic douches were freely used. At the time of reporting the case, healthy granulation had commenced, and convalescence seemed assured.

The second case reported by Dr. Gimard ended fatally. The patient was a boy of fourteen. Severe gastro-intestinal symptoms were present in this case, and much hemorrhage from the bowels occurred. Purpuric and ecchymotic patches were large and widespread. The œdematous condition was confined to the legs, which were somewhat paraplegic, and was most marked on the right side. The white blood-corpuscles were increased in size and number. The temperature was often but not always of a mild febrile type.

Three or four large phlyctenules formed about the right knee.

Slight ulceration of the buccal mucous membrane occurred, and sloughs formed and separated over the right elbow, both knees, and one great toe. Synovial distension of the right knee recurred. The patient succumbed with symptoms of general septic infection.

On autopsy, the liver was found yellowish and fatty, weighing 980 grammes. The spleen contained three infarctions and weighed 140 grammes. The kidneys were congested and full of small infarctions. There were purpuric patches throughout the gastro-intestinal mucous membrane.

The synovial sheaths along the instep were filled with a bloody exudation, and the right knee and left hip were filled with grumous pus.

A third case[1] has been published by Dr. S. W. Budd, of Petersburg, Va.

The patient was a man of twenty-eight, suffering only from tape-worm and a capricious appetite which induced him to live chiefly on sweet things.

Attack commenced with pain in right ankle. The ankle became swollen and

[1] Case of purpura hæmorrhagica — extensive sloughing—loss of penis, etc.—*Virginia Med. Mo.*, Oct., 1887.

painful, with a few spots like flea-bites on the skin. The pain was worse next day, and around the ankle and up the leg were purpuric spots, varying from the size of a flea-bite to a quarter dollar. On the left leg there was deep-seated pain in the calf of leg, but no swelling at that point, but there was slight puffiness about left ankle-joint; no constitutional disturbance except loss of appetite. Rochelle salts were ordered The next day the purpuric spots were larger, and there was pain in right elbow, followed by œdema of forearm and hand; itching of skin; petechial eruption. Was put on salicylic acid.

For three days the swelling gradually extended up the arm to the shoulder and across the chest. On the night of the sixth day he complained of sore throat, so painful as to prevent sleep. Deglutition painful and difficult. By 10 o'clock of seventh day he was unable to swallow at all. Fluids returned through the nose, accompanied by swelling of the face, followed shortly by purpura.

By 1 o'clock the œdema had altered the face beyond recognition. The eyelids were as large as hen's eggs, and of a deep purple color. Beneath the conjunctivæ there was a sheet of bright-red blood. The forehead, nose, lips—the entire face—were frightfully swollen and discolored by effused blood beneath the skin, extending under the scalp, resembling a man most brutally beaten or stamped in the face. A profuse ropy secretion poured from his mouth, too tenacious to be expectorated, and which threatened to strangle him if he lay down. The tonsils and palate were very œdematous. Purpura covered the entire body, the spots varying from one third of an inch to several inches in diameter, not raised above the level of the skin, except a few bullæ, the largest on the dorsum of the right forearm, which was swollen to four times its natural size and looked gangrenous. Being unable to swallow, hypodermic injections of ergotine were given, with hot astringents sprayed into the throat every few minutes.

By 3 o'clock P. M. the secretion in the throat was more tenacious, and added materially to his suffering from œdema of the glottis.

A mixture of the carbonate and muriate ammonia was given, and a 20 per cent. ointment of oleate mercury was freely applied to the neck.

By 7 P. M. his breathing was easier, and the œdema of the glottis gradually disappeared.

On the eighth day patient much exhausted; no hemorrhages from any mucous surface. Ordered a mixture of tincture of iron chloride, potash chlorate, and quinine every four hours.

On the ninth day œdema of mucous membrane of mouth. Lips very protuberant; tongue an inch thick and protruding between teeth.

On the tenth day stinging pain in the penis, accompanied by great restlessness and nervous irritability, followed by œdema of that member and scrotum, and a dark spot on under side of penis at beginning of anterior third. The discoloration gradually extended back to the scrotum, and by the twelfth day a gangrenous spot an inch in diameter at site of first appearance. Temperature, 102°; pulse, 120—full, compressible. Tongue heavily coated; bowels torpid; abdomen tympanitic. Bowels moved by salines. Tartrate of iron and potash and digitalis ordered, with free administration of milk and whiskey.

The general œdema of face and extremities had now entirely gone, and the purpura passed through the successive changes in color.

On the thirteenth day a second eruption appeared, confined to right hip, lower part of abdomen and back. Like all preceding and subsequent eruptions, it was ushered in by rheumatic pain in the joint, formication and itching of skin, followed in a few hours by purpura.

The gangrenous spot finally loosened at the edges, and an extensive slough of skin and subcutaneous fascia of the entire penis (except about an inch on dorsum next to pubic arch) began to separate. Portions were cut away from time to time, leaving the lifeless glans penis attached to the body only by the urethra. This was snipped off with scissors. By the twenty-fifth day all the slough had cleared off, leaving a pointed ragged stump. The corpora spongiosa suffered the most. There was a button-hole into the urethra large enough to admit the large end of a lead pencil, and through which most of the urine escaped. The raw surface extended on dorsum to within an inch of the pubic bone, on the under surface reaching to and *on* to the scrotum for an inch or more.

Twenty-ninth day, extremely anæmic;

pulse, 125–130; very weak. Ordered mixture:

℞—Pot. chlor. . . . . 3 j.
Mercuric bichlor. . . . gr. ss.
Sol. chloride arsen. . . . gtts. xx.
Tr. chloride iron . . . 3 ij.
Water q. s. . . . . ℥ vj.
M. SIG.—Tablespoonful doses.

Thirty-first day, patient's general condition improved since separation of slough from penis. There was found marked consolidation of lower lobe of right lung.

On thirty-fifth day, suffered acute pain in right shoulder for several hours. It was not relieved by morphine hypodermic, as similar attack two weeks previously had been. It was followed by a great oppression—sense of weight over sternum. Nothing gave relief; twelve hours later, suffering no less; pulse 136, weak, compressible; temperature 102°. Ordered grs. x carbonate ammonia every two hours; second dose relieved him entirely. From this time his improvement was uninterrupted though slow. He got up on the sixty-seventh day of sickness, but was not able to stand alone. Penis well; the contraction of cicatrix draws it down to one side, and in relaxed state it is not over an inch long. At no time of the attack was there loss of blood from any mucous surface—either nose, stomach, bowels, or kidney. He returned to duty at the end of four months.

SURGERY.

Dunlap (A.) on Laparotomy in a Female Child not an Hour Old.—The following case was reported ten days after the operation:

"The child was perfect in every respect, vigorous and healthy, except that the bowels, commencing close to the duodenum, down to the sigmoid of the colon and omentum, with the mesentery, dragged through a small opening in the umbilicus, and had been developed in a sac formed in the umbilical cord. The sac would have contained about a pound and a half. I found that it was impossible to return them through the opening without enlarging it, and then when I commenced to enlarge the opening I found that the abdominal cavity was so contracted from the absence of the bowels being developed in it that it would not contain them without enlarging it. I therefore made an opening, commencing in the umbilicus, running up two inches, and then began stretching the walls of the abdomen with my fingers; then catching portions of the bowels and forcing them down into the cavity, while assistants, with hooks passed through the cut edges of the walls of the abdomen, held them firmly up. In about twenty minutes I succeeded in forcing them in and closing the wound with five sutures and ligatures to the cord close up to the natural skin. The operation was performed without an anæsthetic."

The child apparently experienced no pain from the procedure. One half teaspoonful of castor-oil was given, and it was followed by a free movement.

Five or six doses of tincture of opium, each one third of a drop, were given.

The child at time of report sleeps and eats well. Sutures out.—*Jour. Am. Med. Ass'n* Jan. 14, 1888. G. B. P.

Folet on Herniotomy in an Infant.—M. Folet, of Lille, at a recent meeting of the Académie de Médecine, drew the attention of his hearers to an untoward consequence which may follow herniotomy upon the newly born, namely, with reference to the ultimate development of the testicle on the side operated upon. He performed this operation upon a child thirty-three days old. The testicle on the corresponding side atrophied completely, and eight months later was no larger than a pea. He considered this atrophy due to compression of the funicular vessels by the cicatrix.—*Gaz. Hebd. des Sci. Méd. de Montpel.*, Dec. 31, 1888.

Van Duyn (J.) on a Case of Gunshot Wound of the Chest Involving the Brachial Plexus and Axillary Artery, Attended with Neuritis and Aneurism—Ligature of Subclavian Artery—Recovery.—A boy (age not stated) was shot in the back while sitting in a wagon and stooping over to control an excited horse.

The ball, a shot three eighths of an inch in diameter, was one of nine fired from a gun at a distance of six rods from the patient, and the wound of entrance was one and one half inches to the right of eighth dorsal spine, the ball lodging beneath the middle of the right clavicle.

Following the injury there was immediate loss of power in the right hand and severe shock. Crepitation was present about the wound of entrance and also at location of bullet.

Later there was marked dyspnœa and coughing up of some blood and pain in the chest, with numbness of the first and second fingers at their extremities.

"On the third day there was great dyspnœa and excessive heart's action. Although auscultation had been practised from the first to determine the condition of the lung, which manifested itself by an almost entire absence of respiratory movement and no râles, no sound connected with the circulation had been discovered. But now, over the tumor, under the clavicle, there was a rough sound, synchronous with the cardiac systole. From this time on the dyspnœa gradually improved, and the normal vesicular respiration sound reappeared in the wounded lung. The percussion note became more resonant as low as the fourth and fifth rib, where, until then, it had been flat."

On radial side of arm and in thumb, first and second fingers, there was pain and hyperæsthesia.

On the twenty-third day the bullet was extracted from beneath the clavicle.

One month later a tumor was noticed in this region, which presented the signs of aneurism when examined on the patient's return from the country six months after the receipt of the injury. There were also areas of numbness in various parts of the right hand at different times. The arm was practically useless. The reaction to faradism was lost in the radial group of muscles, except feebly to the strongest currents, and all the remaining muscles of the forearm and hand reacted but feebly to ordinary currents. Anæsthesia was clearly limited to the radial side of the forearm and hand.

The right forearm and hand were atrophied. With the hope of improving the patient's general condition, he was kept in bed for two months, at the end of which time there was improvement. There was then inability to rotate forearm, extend fingers, or abduct arm.

Eight months after the injury the right subclavian artery was ligated on the first rib, the wound healing primarily.

This was followed by gradual improvement. Numbness disappeared from the forearm and hand, and there was a progressive increase in the power of grasping. The temperature of the right hand was .7° C. lower than that of the left. There was marked clumsiness in its movements. [It is not stated whether the power of extension and rotation was regained.]

From the time of the injury up to that of the operation, the patient had frequent attacks of blindness without loss of consciousness, lasting several minutes each time.—*Buffalo Med. Jour.*, Jan. 1888.

G. B. P.

Williams (C.) on a Case of Rupture of the Internal Carotid Artery within the Cavernous Sinus.—J. H., male, aged twenty-seven years; no venereal history; hard drinker; good general health. Patient was awakened by a fit of violent vomiting and retching, which lasted fifteen hours. The retching was very violent, and with it there was intense pain in the head and a whizzing, whirring noise, seeming to patient loud enough to be heard by others. Was not seen by a physician until some days later. Then the left eye was protruding and the lid discolored.

Seen about six weeks after first attack by the writer.

Left eye markedly prominent, lids puffy and blue, the episcleral vessels enlarged and full, chemosis of conjunctiva, pupil dilated, media clear. Retinal veins enlarged and tortuous, neuro-retinitis, no hemorrhages.

V. $\frac{10}{30}$, Em. Right eye, V. $\frac{10}{10}$, Em. Auscultation of the eyeball and side of the head disclosed a loud bruit, continuous, with an accession that was synchronous with the first sound of the heart. The bruit was heard not only over the left side everywhere with great distinctness, but all over the head; with greatest distinctness over the left eye and next over the left temporal region; nothing of interest in the ear.

The patient was then sent to the hospital. Two weeks after admission to the hospital pulsation of eyeball first noticed when eye was examined in profile. Pulsation could also be felt by the finger when the eyeball was forced into the socket.

About this time, too, a small oblong tumor, somewhat curved in outline, near the size of the little finger of a child, appeared just below the lower lid and toward the inner angle. "This tumor pulsated, was easily compressible, and of bluish color; pulsation was not to be felt by the finger."

Two weeks later the left common carotid artery was ligated with catgut by Dr. E. J. Abbott, causing bruit and thrill to permanently disappear.

On the tenth day, there being still a small pocket at the lower angle of the wound, patient was up and about, when sudden profuse hemorrhage occurred.

This was controlled by digital pressure, and the artery again ligated above and below the point of rupture.

Three days later became hemiplegic, then aphasic, and died one week later—about three months from the date of first symptoms.

An autopsy was made one half hour after death. There were some evidences of a pachymeningitis over the vertex. The sinuses were well filled with dark fluid blood. A large portion of the left anterior hemisphere was found to be converted into a soft pulp of about the consistence and appearance of very soft *fromage de brie;* brain otherwise normal. The internal carotid, from its entrance into the cranial cavity, was examined without the discovery of any thing abnormal in its gross appearance. It was the intention to have saved it for further examination but, unfortunately, it was included with the brain substance and sent away with the body. The posterior wall of the orbit was chiselled away and the orbital contents carefully examined. Nothing abnormal was found, except perhaps some increase of the adipose tissue. The ophthalmic vein may have been somewhat enlarged, but it was not compared with the vein of the other side.

"As unsatisfactory as is the result of this post-mortem examination, it teaches a great deal. The only two pathological conditions which could by any possibility, I think, give rise to the physical condition which existed in this case, are aneurism of the internal carotid within the cranium, or rupture of the internal carotid within the sinus cavernosus. Aneurism of any vessel within the orbit could not give rise to all the symptoms; besides, by continued observation, lasting a month, I had excluded that condition, which I was anxious to find. Any malignant or other tumor of whatever nature was likewise excluded."

The small pulsating tumor under the lower eyelid has been reported in other cases, and is a strong point in favor of rupture of the internal carotid.

It is an enlarged vein whose contents receive an impulse with each influx of arterial blood into the cavernous sinus.

The author believes that a vent might have taken place in the artery, and have healed, leaving no trace of rupture on macroscopic examination.

One hundred and six cases have been collected by H. Sattler, in Gräfe and Sämisch's "Handbook," from the literature of a period of seventy years.—*Jour. Am. Med. Ass'n*, Jan. 7, 1888. G. B. P.

MISCELLANEOUS.

Beckwith (F. E.) on Removal of a Vaginal Tampon Encrusted with a Complete Shell of Lime Salts, Twenty-nine Years after its Insertion.—The patient, who is seventy years of age and single, was admitted to the New Haven Hospital on June 1, 1887. Her appearance was cachectic and she was very weak from long-standing diarrhœa with tenesmus, which compelled her to go to stool very frequently. She was so deaf that Dr. Barrows, the house physician, found it impossible to obtain a history.

The tenesmus and diarrhœa were relieved by opium and kino, and it was found that with her straining nothing except clear mucus came away. Upon second inquiry, the fact that she had not had a fæcal movement for three week was brought to light.

June 5th. The nurse saw a foreign body an inch within the vagina, which Dr. Barrows, upon examination, found to be a hard body, immovably fixed in the vagina, and therefore transferred the patient to the gynecological service.

June 7th. I examined vaginally, finding a hard rounded mass, about three inches in diameter, having at its presenting portion a large opening with jagged edges, which mass completely occluded the vagina and flattened the rectum.

The interior of this calcareous ball was full of a soft dark-brown material which gave out a most offensive odor.

A profuse, thin, foul-smelling discharge flowed out between the shell and the vaginal walls.

A tenacious, transparent, odorless mucus oozed from the rectum, which was found to be in healthy condition.

The diagnosis of a foreign body covered with a calcareous shell, was made. The shell was about a quarter of an inch in thickness, and easily broken with the uterine dressing-forceps.

Several ounces of the shell and its contents were taken away, until further renewal

was stopped by free arterial hemorrhage, which was arrested by a tampon of absorbent cotton dipped in glycerin.

The mass inside came away in shreds and in the form of pulp of the consistence of putty.

It is evident that long ago a plug of coarse cotton or woollen stuff was placed in the vagina, and that around this a stony shell gradually formed. The patient did not know that any thing had been put into her vagina.

Dr. Crane, upon microscopical examination, found particles of lime salts, small shreds, and crystals of tyrosin, but upon examination of a portion of the mass removed later, could find only shreds and lime particles.

A portion of the shell and the soft contents were sent to Herbert E. Smith, professor of chemistry in Yale University, who found the former to consist of carbonate and phosphate of calcium and fat, and the latter of broken and interlacing cotton fibres.

June 20th. I examined with Sims' speculum, finding the vagina empty, and the cervix uteri in a state of cancerous degeneration, involving also the fundus vaginæ.

The edges of the cancerous tissue were ragged, ulcerated, and bled from the lightest touch.

July 6th. The patient died of progressive asthenia.

Fortunately, Dr. Max Maihouse, of this city, who sent the patient to the hospital, could give me the following brief statement:

About twenty-nine years ago, around the period of the menopause, she consulted a midwife in Germany for supposed falling of the womb, following heavy lifting efforts. This midwife slipped a rude tampon into the vagina, and the patient never reported again.

It is known that since then she has not consulted a physician.

This tampon lay in the vagina until I removed it, in the degenerated condition above described, twenty-nine years after its insertion.—*Am. Jour. Obstet.*, etc., Jan. 1888.

Hare (H. A.) on the Physiological Action of Arnica Montana on the Circulation.—Arnica slows the pulse in ordinary medicinal dose by stimulating the pneumogastrics both peripherally and centrically, increasing the fulness of each pulse-wave, and also slightly the arterial pressure. That the increased arterial pressure is chiefly due to increased work done by the heart is strongly indicated by the fact that in none of the experiments was arterial pressure influenced to any extent, by any dose, except when an enormous amount (5 c.c.) was injected rapidly into the jugular vein, when there was for the space of from ten to fifteen seconds a fall in pressure very evidently due to momentary heart-failure, as the pressure returned at once to normal as soon as the heart freed itself from the volume of the drug.—*Bost. Med. and Surg. Jour.*, Jan. 12, 1888.

Extraordinary Fecundity. — An anonymous writer sends the following to the Canada *Medical Record*, Nov., 1887:

In your last number I observe a quotation from *Le Journal de Genève*, that a woman has given birth to seven children within an interval of four years, and that they are all alive.

I am sorry to take from her any portion of her claim as the *largest* benefactress, but she is eclipsed in that direction, in the city of Montreal, where a woman has given birth to twelve children in five years. There were two arrivals every ten months.

Hill (N.). Twins: One Black and One White.—A black girl about eighteen years old gave birth to twins at seven months, one of which was as black as the *ace of spades*, and the other as white as any white child I ever saw. This girl has been engaged as nurse in a white family a part of the year, but she has associated with both white and black. Both cords were attached to same placenta.—*Med. and Surg. Reporter*, Dec. 31, 1887.

Scarff (J. H.). A Recipe for Sore Nipples.—The following is a recipe that I have been using for a long time for sore nipples in nursing mothers. I cannot report a single case of failure when it has been used as directed. I would like my professional brethren to know of it, not that I consider it a specific, but that it has done me service in many cases when other means had failed. The nipple should be cleaned with a little warm water, to which has been added a small amount of borax, before applying.

℞—Balsam Peru		ʒ ss.
Tr. arnica		ʒ ss.
Sweet almond oil	ää	℥ ss.
Lime water		

M. SIG.—Shake well and apply to nipples with camel's-hair brush.

—*Maryland Med. Jour.*, 1887, p. 169.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital.

VOL. V., NO. 5. February 2, 1888. WHOLE NO. 53.

CONTENTS.

	PAGE
Leading Articles	53
Therapeutics	57
Diseases of Women	59
Miscellaneous	62

LEADING ARTICLES.

On Bloodletting.—It is with sincere regret that conservative practitioners have seen this really valuable remedy, because of former abuse, so utterly and undeservedly neglected for a score of years. That, judiciously employed, it was an invaluable resource to our fathers no one who reads, nor any one who had the benefit of their personal teaching, can for a moment doubt. Why, then, aside from the acknowledged abuse of the remedy, its disuse? In the first place, it ceased (we say it with shame) to be fashionable; in the second place, drugs have been added from time to time to our pharmacopœia which have been found to fulfil some of the indications formerly met by venesection.

Thought upon the subject, however, leads one to ask himself the following question: May it not be possible that in the last quarter of a century the type of some diseases has so changed as to render such an heroic remedy unnecessary? During this same time modes of life have altered, and new industries have sprung up; and it is safe to say that new diseases, or, at any rate, new phases of disease, have developed.

Whether the apoplexies, pneumonias, inflammations, and fevers of our fathers were severer or different from those of our day we would rather some one older than ourselves would state; but it is our firm conviction that diseases of that and other classes have become less *foudroyantes* and more asthenic.

A slight but very widespread revival of bloodletting is, we are glad to see, now taking place, and we hope that, with our enlightened knowledge of pathology, it may not be abused, but used with great profit.

In this connection it will be interesting to cite some of the recent contributions to the subject.

In a recent number of the *Lancet*[1] Dr. Addy related three cases in which bleeding was performed, in two of which it rescued the patients from imminent death. The first case was a man, aged about fifty, who had suffered from hæmatemesis, cirrhosis, ascites, and albuminuria; after recovery from these ailments, the patient, who had also aortic disease and high-tension pulse, was seized with convulsions lasting more than an hour; he became unconscious, cyanotic, and breathed with great difficulty. About twenty ounces of blood were removed from the arm; the convulsions ceased, consciousness returned in twenty-four hours, and the patient had continued in good health for twelve months. The second case was that of an elderly lady, who was suddenly seized with violent coughing and dyspnœa, the lungs becoming rapidly engorged; on admission, the patient was almost pulseless, and apparently moribund; venesection was performed, with almost immediate relief to the breathing, and the patient rapidly recovered; this lady suffered also from chronic Bright's disease. The third case was a young man, suffering from acute pneumonia: congestion of lungs rapidly supervened, and the patient seemed fast sinking. Blood-letting was tried, and relieved the embarrassed lungs and heart; but the improvement was only temporary.

Dr. J. A. Macdougall[2] has bled many

[1] *Lancet*, Dec. 17, 1887.

[2] "On the Remedial Value of Bloodletting," *Am. Jour. Med. Sciences*, July, 1887.

cases, a few of which are summarized by him.

M. B. was thrown with great force from the conveyance in which he was driving, and pitched upon his head. He had well-marked concussion, followed by decided reaction, with a full but not too rapid pulse. Some hours after he was first seen, he was attacked with severe headache, complained of a rushing noise in his ears, had some embarrassment in his breathing, was a little confused, had widely dilated pupils acting slowly to light, and his pulse had fallen from over 80 to 52 in the minute. He was at once bled to the extent of a pint, which relieved his headache and his breathing, and under which his pulse rose to its old rate of 80 in the minute.

A few days after, having, contrary to all instruction, risen from his bed and made some exertion, the old symptoms reappeared—headache, dilated inactive pupils, and slow, laboring pulse. Venesection again, and with this great relief, and an ultimate satisfactory recovery.

A. H., a strong, muscular ploughman, had, by an unfortunate accident, the wheel of a heavily loaded cart "backed" across the right side of his chest. Five at least of his ribs were fractured; he had considerable emphysema, some pneumothorax, and pretty profuse hæmoptysis. Thirty-six hours after the receipt of his injury he was found with all the symptoms of acute pneumonia. He had grave inflammatory fever, his temperature was high, his pulse hard and full, he had an incessant short cough, and much difficulty in his respiration. That this difficulty was in a measure brought about by the pain attending upon the increased respiratory efforts was very apparent.

It was impossible to examine satisfactorily the anterior part of the chest, but behind he had over a wide area very decided dulness upon percussion, with harsh respiration. He was bled freely from the arm, with great and immediate relief. Within the next twenty-four hours his pulse and temperature fell quickly, and although his lung afforded evidence of more or less consolidation for some days after, it never reached the stage of true hepatization.

B. G., a healthy lad of twenty, was the subject of right-sided pneumonia. For the first five days of his illness matters went fairly well with him. He had a quick pulse, and a high temperature, but his respiration was not more rapid, or more distressing than the pretty complete involvement of nearly his whole right lung readily explained.

On the sixth morning, however, the aspect had changed—he was struggling for breath, his face, his lips, and his tongue were livid, his pulse was quick and small, but *he had a strongly beating heart* and copious pneumonic expectoration. Examination of the back of his chest revealed the fact that, in addition to the harm in his right side, he had now fine crepitation over the left base, proving that both lungs were implicated. He was at once bled to ten ounces, and with immediate relief. Stimulants and liquid nourishment were given him with a free hand, his poultices were continued, and he ultimately made an excellent recovery.

A gentleman, past middle life, had had a nearly fatal pulmonary apoplexy. He consulted Dr. Macdougall on account of dyspnœa on exertion. Small doses of calomel were prescribed,and he was carefully dieted. He caught cold and had more or less cough. Up to the time of his retiring to rest he made no complaint, but, as sleep was about to overtake him, he was suddenly aroused by a feeling of intense dyspnœa. When seen, he was propped up in bed, and wheezing loudly; his face was flushed, his expression anxious, and, while he breathed with great difficulty, he expectorated from time to time the reddish mucus characteristic of œdema of the lungs. His pulse of 80 was hard and laboring, but his heart's action was not perceptibly increased, either in rapidity or in force, and his chest, clear on percussion, was filled with mucous and submucous râles, with an entire absence of vesicular murmur. Short time as the attack had lasted, his condition was too grave to be benefited by the use of expectorants. He was now more or less unconscious, he was livid in color, and his heart, quickening in action, was unquestionably failing in power.

The opening of a vein in the left arm, performed in the usual way, proved futile, for the blood was so thick and tarry that it would not flow from it; so, dissecting down upon the right median basilic, and exposing its surface clearly, a long and free incision was made into it. By constant pressure and friction the stream began, slow at first, and then more full, and when a pint of blood had escaped he expressed

himself as "beginning to be relieved." Another pint was taken, and, as the arm was being bound up, he said: "I am quite well; I could rise and walk." Within thirty-six hours, and without the occurrence of much expectoration, all râles had disappeared from his chest, and he was in his usual health. Since then he has had another similar attack, not attended, however, with quite such peril, for he was seen early, and he was bled to twelve ounces. The relief obtained upon this occasion was as striking as it was upon the previous one.

A man, suffering from scarlatinal nephritis, had been ill for three days, and had been treated in the most judicious way. He had been purged, had hot-air baths, had pilocarpine injections, and such a diet as was best suited for him. Still he did not improve, his urine was exceedingly scanty and highly albuminous, and a complaint of some dimness in vision made his attendant anxious about him. When seen he was in a violent convulsion, a foreboding of which occurred about an hour previously when he became suddenly quite blind. When the violence of the seizure had passed he was deeply unconscious, pale in the face, with a small pulse at the wrist, hard, however, and unyielding as whip-cord, and with a forcibly acting heart, of which the sounds, both at base and apex, were highly accentuated. He was bled freely from the arm, and with such benefit that in a little while he became conscious and made complaint of headache. Two hours after we left him he had another but much milder fit, in the struggles of which the retaining bandage on the arm became undone, and he sustained a further loss of blood. This, however, did him no harm, for when his attendant, sent for hurriedly to visit him, arrived, he found him fully conscious and free from discomfort. This condition happily proved permanent, there was no recurrence of the convulsion, and he made, thanks largely to the bloodletting, an unusually rapid and satisfactory recovery.

A farmer's wife of forty-five, stout, red-faced, and plethoric, was thought to have had an apoplectic attack. For nearly four months the catamenia, normally large in amount, had disappeared, and latterly she had been short-winded and her respiration very easily distressed. On the evening preceding, a slight menstrual discharge had made its appearance. At midnight she was discovered to be in a condition of profound coma. The face was flushed and somewhat congested, her pupils dilated and inactive, her heart slow and heaving in its action, with a *clanging* accentuation of the second sound at the base, and her pulse was hard, full, long, and incompressible. There was a little discharge from the vagina, and some urine drawn from the bladder contained a trace of albumen. The albuminuria rendered the diagnosis uncertain, but as the acuteness in arterial tension was unmistakable, she was bled freely from the arm. Nearly thirty ounces were taken and this without faltering of the pulse, and, indeed, before it became large and soft. Then she became fully conscious and made complaint of a little nausea. As her bowels were confined, a brisk saline purge was prescribed and a restricted diet. Next day, her doctor found her downstairs presiding at the tea-table, perfectly hearty and well.

In the puerperal state marked severity of attack, with extreme congestion of the face, and turgidity of the vessels, as its characteristics; and profound coma, with flushed face, and a hard, long pulse, in the intervals of the seizures, form, may be, the most reliable guides for such treatment. A primipara was seized within an hour of her delivery with convulsions of frightful severity; after choloroform had been used without avail, a free venesection altered at once the whole aspect of her condition.

A gentleman of sixty, of well-marked gouty tendency, suffered from headache, giddiness, and extreme irritability of temper. He had all the physical signs of high arterial tension, but without evidence of any organic disease. He was treated by calomel and salines as active purgatives, and he was carefully dieted, but with little improvement, until the occurrence of a severe epistaxis brought him entire relief. Then it was recognized fully how certainly a moderate bloodletting would have saved him suffering.

Dr. Turner Anderson[1] has successfully employed bleeding in sunstroke.

A muscular laborer of thirty was seen to suddenly reel and fall to the ground. He was found unconscious and incessantly moaning. The conjunctivæ were congested, the face flushed, and the head and body hot. The pulse was 80, full and incompressible.

---

1 "Phlebotomy in Sunstroke," *Am. Pr. and News*, Sept. 3, 1887.

Cold applications had no effect so a vein was opened in the usual manner and a large wash-basin more than half full of dark blood abstracted. The patient became at once more quiet, and breathed with greater ease; his pulse grew soft and compressible, and he showed marked signs of returning consciousness. In less than ten minutes, with the continuous applications of cold water, he had sufficiently recovered to state that he wanted to relieve his bowels, and soon after passed two very large liquid stools in close succession. He was then carried to a porch at his quarters and left with the direction that cold water be continuously applied to his head. On the following day he was as well as before the seizure.

A butcher, aged fifty, had been drinking freely all day, and was found in his yard in an unconscious state at 5 P.M., July 19th. His body was hot to the touch, his face red and apparently bloated, pulse slow, respiration labored and somewhat stertorous. He was not wholly unconscious, but nearly so; conjunctivæ injected, but sensitive to the touch. The attendants were applying ice to his head, hands, and feet, but not in such a way as to be of service. He was freely douched with ice-water, while cloths wrung out of ice-water were applied to the head and chest, and was bled from the arm in the median cephalic until his pulse became soft, full, and compressible. Two thirty-grain doses of the bromide of potassium were ordered, and he was out of danger in a few hours.

A man of forty-three went into a state of unconsciousness, with constant moaning and stertorous breathing. Severe convulsions soon set in. His pulse was slow and full, unconsciousness was complete, and the breathing loud and stertorous. The flexor muscles of the forearms were tightly contracted, and the arms were crossed on the breast. The patient was apparently dying. The arm was with difficulty straightened enough for the proper adjustment of the fillet, and when opened, the vein emitted but little blood, although opened freely. Thirty grains of chloral were given by the rectum, and repeated three times at intervals of thirty minutes. After the first injection of chloral the third convulsion occurred. The symptoms being plainly those of congestive apoplexy, it was decided to open the temporal artery. This done, the patient bled so freely that many towels and cloths were saturated. This procedure had a most salutary effect, and although two or three slight convulsive seizures recurred, and the total unconsciousness continued, he ceased to moan, his stertor was less pronounced, and his condition much improved. Recovery gradually took place.

Dr. G. L. Peabody has employed venesection in poisoning by illuminating gas.[1]

A negress, sixty-five years of age, had been found comatose in her bedroom, having accidentally turned the stop-cock of the gas-fixture *all the way round*. When admitted she was absolutely comatose, pulse 150, respiration deep, full, and regular. Inhalations of oxygen were given. During the forenoon she improved, but when seen in the afternoon the patient was still comatose, although the muscles of the face could be made to respond to external irritation. The stimulants and oxygen were continued. On the next day she was partially conscious, and recognized the house-physician. The oxygen was discontinued. There was not any very marked redness of the mucous membrane, as sometimes is seen. There was no cyanosis, except at first; there was no frothing at the mouth. During the day (Monday) she continued to improve apparently, but when he saw her on Tuesday the patient had distinctly retrograded, had again become comatose; her pulse had risen to 150 or 160; she swallowed with difficulty, and it was absolutely impossible to arouse her. She was then bled to the extent of twenty ounces. The oxygen was ordered to be given for ten minutes every hour, and the stimulants to be kept up actively. About three hours afterward the patient had improved so much that it did not seem necessary to resort to transfusion. That night she again became conscious, steadily improved, and had since done well. There was nothing peculiar in the appearance of the blood drawn in this case.

Mr. G. P. Atkinson writes[2]: On April 20, 1856, I was called in consultation to a confinement case, where I found an arm presentation with the fœtal hand protruding beyond the vulva, and the vagina so swollen as to make turning an impossibility. I bled the patient to ℥ xx., and gave a soothing draught, and we left her quietly for fifteen minutes; on re-examination, I found all swelling had subsided;

[1] *Med. Record*, Nov. 12, 1887.
[2] *Br. Med. Jour.*, Jan. 14, 1888.

turning was readily effected, and delivery completed within ten minutes, and she made a good recovery. Would not bleeding be likely to be followed by similar effects in cases of material obstruction, with an inflammatory constitution of surrounding walls of other natural passages—for example, the larynx or trachea containing one or more tumors; and would not its effects be likely to prove more thorough and durable, and attended with little risk to the patient, compared with a serious operation.

Dr. R. J. H. Hatchett (M. D. University of Pa., 1835), of Henderson, N. C., says [1]: "I honestly believe (and I here appeal to the older members of the profession to say if I am right or wrong) that thirty years ago our patients were much sooner relieved, we had a much larger percentage of recoveries, and our patients while sick were kept in a more comfortable condition, and we had fewer chronic cases, than at the present time."

After some remarks on the physiological effect and modus operandi of depletion he says [1]: "The old practitioner who has spent the best part of his life in studying and observing the methods of nature in the cure of acute attacks, who has witnessed many rapid spontaneous cures resulting often from hemorrhage, cholera morbus, and diarrhœa, or from some other rapidly depleting cause,—the old practitioner, taking a common-sense, and therefore a reasonable view of the situation, believing that he who had enough blood in his body while in a state of health—while the waste-gates of nutrition and secretion were standing open, and acting as safety-valves to a crowded circulation; that the same individual, when sick, and the waste-gates closed, would have *too much* blood for his comfort or safety; and that nature, in her efforts for relief, by the rupture of some blood-vessel, might perform the operation at some dangerous point, as the brain, the lungs, stomach, or intestines, seeing that the object nature was striving to accomplish was depletion—then, I say, this old fogy would come to her help by cording the arm, and opening a vein, and thus accomplish in a few minutes a work which might have required of unaided nature many days or weeks to perform, if, indeed, at all able to perform, especially if hindered by drugs which paralyze her nerves, the seat of her recuperative energies."

"The old doctors used to talk a good deal about the recuperative powers of nature. Where do you find these recuperative powers, if not in the nerves and their centres? The *fashion* of the present advanced (so-called) medical science is not to *arouse*, but to put to sleep, this wonderful apparatus, which was intended as a perpetual guard, whose business was to sound the alarm at the approach of the enemy. The first aim of the doctor now seems to be to capture these garrulous watchmen—to imprison and gag them, so that they shall do no work and tell no tales Again, I ask, is it wise to do so? Nature cures disease by means of her mysterious vital action, and the doctor should place no restrictions on her efforts.

"Common-sense—that is, reasonable sense—is better than *much* book-learning Common-sense *is* learning, acquired by patient observation and reflection, imprinted on the brain, and is ready for reference at any time. Much book-lore tempts a man to rely more on authority than on his own judgment; and relying on authority prompts him to catch and make a panacea of every new remedy. He must keep up with the advanced strides of the profession and to do so, he forgets all that is behind and presses on to that which is before—no faith in any thing that is old—no conservatism; is prepared to believe in all things that are new, but does not *hold fast* to that *which is good.*"

[1] "A Plea for Bloodletting from a Practical Standpoint," *Virg. Med. Mo.*, Oct., 1887.

THERAPEUTICS.

Riche on the Action of Nickel.—The author's experiments were upon guinea-pigs and dogs, to which he administered the acetate of nickel in 2-, 9-, 12-, 20-, and 25-grain doses, without appearing to disturb the animals much. One dog in particular, which had been experimented on for 161 days, and which had absorbed during that time the equivalent of 5 drachms of metallic nickel, not only did not die, but increased in weight. For these and other reasons the author concludes that nickel is no more dangerous for cooking utensils than is iron, to which it bears considerable resemblance.—*L'Union Médicale*, January 5, 1888.

Pullin (B. G.) on the Treatment of Warts by the Internal Administration of Arsenic.—The author at first combined the above treatment with the local use of escharotics, but later he used arsenic internally alone, and is satisfied that the resulting cure is complete and rapid, and that the remedy is particularly adapted to cases where the lesions are multiple, and hence unfitted for the use of caustics.

The remedy is given in the form of liquor arsenicalis (Fowler's sol.), in doses of from ℥i to iv. three times a day. Of the cases he narrates, one was cured in one week, one in ten days, and one in two weeks. — *Bristol Med.-Chir. Jour.*, December, 1887.

Drzewiecki (J.) on the Use of Calomel in the Prevention of Pitting in Small-pox.—The author says:

"Having frequently had cases under my care, during the small-pox epidemic of last summer at Warsaw, I convinced myself that calomel, applied as powder on the face, does not prevent the development of vesicles from the papules; but when vesicles or pustules were developed it caused them almost immediately to dry up, and in this manner prevented the formation of marks. How and why calomel acts in these cases I do not pretend to explain. However, we may suppose that possibly several agents have a share in producing this result. It may act as calomel, or sublimate, or mercury, by destroying the micro-organisms, or preventing their development.

"In my cases I used calomel alone, dusting it over the face, or I mixed it with starch in the proportion 20 or 30 %."—*N. Y. Med. Record*, Jan. 21, 1888.

Haslam (W. D.) on the Oleate of Zinc and Iodoform in Gynæcology.—I should be glad to record my experience of the value of iodoform and oleate of zinc when mixed together, either in equal portions or with two parts of iodoform to one of the oleate, according to the effect desired.

The dry treatment in gynæcology having attained such success, I particularly wish to record the beneficial effect of this powder on ulcerated surfaces of the uterus, or to aid granulation after the application of strong caustics. It may be applied by insufflation, or on the tampon, according to the nature of the case. It is especially useful in cancerous ulceration, in which the pain and discharge may be greatly reduced by its use, the fetor corrected, and a clean, granulating surface often left. It diminishes hyperæmia and exudation, and may be used with advantage to the inflamed endometrium as a dusting powder; it will heal up most ulcerations with great rapidity.

The oleate of zinc seems to me to be preferable to bismuth, alum or the oxide of zinc, and when used in combination with iodoform, it will be found to be soothing, astringent, antiseptic, and healing.—*Br. Med. Jour.*, Jan. 7, 1888.

Cultivated Ipecacuanha.—It is satisfactory to learn that a sample of the cultivated ipecacuanha, probably imported from Singapore, has, in the hands of Mr. Hare, F.R.C.S.E., yielded results indicating its therapeutic equality with the Brazilian drug. He reports that on comparing a powder of the Indian drug with the ordinary powdered root of the *Pharmacopœia*, he found that in equal doses the action was absolutely identical. In the case of a child, aged seven months, suffering from severe capillary bronchitis, the usual dose of ten grains produced satisfactory emesis and gave relief. When minute doses were subsequently administered, the customary expectorant action was manifested; and, upon alternating the use of the ordinary root with that of the Indian drug, day by day, in expectorant doses, and also, when occasion demanded, in nauseant doses, it was found impossible to distinguish between the two as regards their therapeutic effects.—*Br. Med. Jour.*, Jan. 7, 1888.

Fenwick (H.) on the Reflex Inhibitory Action of Cocaine as a Diagnostic Factor.—The paper comprised a long series of cases in which pain in various parts of the body had been temporarily relieved in 30 to 180 seconds by urethral injection of 20 per cent. solution of cocaine. Cases of its action in neuralgic pain of the cranial, cervical, intercostal, renal, and lumbo-sacral nerves were mentioned, and the reasons for this power were roughly demonstrated to the society by means of decapitated frogs. Thus, without a vesico-rectal injection of cocaine, the leg of the decapitated frog was rapidly jerked out of a weak acid solution in a fraction of a second; but after cocaine had been injected into the bladder or rectum, the leg was not withdrawn until after 20 to 30 or more seconds. This remark-

able inhibitory power was only observed when weak acid solutions (that is, weak irritations) were used. Cocaine possessed no power of delaying the reflex excitability consequent upon stronger acid solutions. The following propositions were formulated: 1. Slight nerve irritations (as neuralgias) of any part can be relieved by injection into the urethra of a few drops of a 10 or 20 per cent. solution of cocaine. 2. Severe nerve irritation, as in the pain of carcinoma, inflammation, etc., cannot be thus relieved. Mr. Fenwick has used this knowledge largely in the differential diagnosis of urinary disease. Thus, if a renal pain was immediately relieved by cocaine, he judged the neuralgia to be due to a slight irritation, such as that experienced in lithiasis, congestion, or grit. If unrelieved (and cases were given), he diagnosed more serious cases (for example, stone, dilated pelvis, etc.). He then drew attention to the value of cocaine in operations upon the bladder and urethra in preventing damage to an unhealthy kidney. M. Tuffier's experiments upon renal congestion produced by distending the bladder or injuring the walls were mentioned, and it was submitted that this flooding of the kidney—which, if the organ was damaged, led to rigors, suppressions, and suppurations—might be partially or wholly prevented by the inhibitory action of cocaine upon the renal circulation.—*Br. Med. Jour.*, Jan. 14, 1888.

[In direct contradiction of this paper seem to be the results of Starr's experiments,[1] although he used only a 4 per cent. solution and made the injection in places other than the genital or rectal tract.—ED.]

DISEASES OF WOMEN.

Laparo-Salpingotomy Done in 1784 in Russia.—M. Schlisinguer in the *Rev. de la Soc. d'Ost. et de Gynéc.*, No. 3, cites a case of laparo-salpingotomy done by Seydel in 1784 in the manner which is now known under the name of Volkmann.

The patient was a woman of 42, a multipara, who had had a miscarriage two years before. In the summer of 1783 she presented herself with a round hard tumor in hypogastric region toward the right side. It had the appearance of the gravid uterus at the third month, and as time went on it kept increasing in size. At the menstrual epoch it was the seat of sharp, shooting pains. At last it attained the size of a two-year-old child's head and became more mobile. Vaginal examination showed the tumor to be attached to the uterus by a short, hard pedicle.

The patient was prepared for operation by baths and the administration of gentle purgatives and Peruvian bark, while just before the operation she was given some laudanum with syrup of white poppies and Hoffman's anodyne.

The operation was performed February 21, 1784 at Sarepta in Astrakan.

An incision was made, right over the centre of the tumor, extending from the umbilicus to the right inguinal ring and the peritoneum was opened with a curved, blunt-pointed bistoury guided by the finger of the operator. Three veins were ligated. The intestines were protected by towels soaked in tepid milk. The tumor presented itself and was opened giving exit to at least a pound and a half of chocolate-colored, odorless, thick, sticky liquid. The operator then perceived that it was not a tumor of the ovary but of the tube.

After evacuation of the sac the operator poured into it some decoction of Peruvian bark, some solution of myrrh, and then introduced a coil of lint steeped in the "balm of Arceus."[2]

To prevent adhesions between the peritoneum and intestines they were separated by strips of muslin dipped in oil of roses. The wound was dressed with linen and a plaster; later it was sutured. During the first few days the surgeon evacuated the fluid by means of a silver tube; but later, as the discharge slackened, the operator sucked out with his mouth a thick, fetid liquid. There was some fever for seven days, but none at the end of the fortnight, when the discharge had ceased, the wound healed and the patient was well. Two years later she still enjoyed perfect health.

Translated for the *Gas. hebd. des Sci. Méd. de Montpellier*, Jan. 7, 1888, by Mme. Al. Tkatchef.

Hydrocele in the Female.—A girl of 19 presented herself to Mr. Richelot[3] with a small inguinal tumor on the right side

[1] "Cocaine as an Aid to Diagnosis in Cases of Neuralgia and Neuritis," *N. Y. Med. Record*, July 2, 1887.

[2] Unguentum elemi, B.P. [ED.]

[3] *Le Courrier Méd.*, Jan. 7, 1888.

which she had noticed for four years. When the girl stood the tumor caused a prominence of the upper part of the labium majus on that side, which disappeared during dorsal decubitus. An inguinal hernia was suspected and an operation undertaken at the request of the patient.

The tumor was reduced and the skin incised, bringing into view a fibrous cord which resembled more a narrow sac than the round ligament, and which penetrated the upper part of the labium. On tracing the sac upwards it was found to communicate with the peritoneum, not directly but by diverticuli and through incomplete septa in such a way as to prevent the prolapse of intestine or omentum. The tumor therefore was evidently a reducible hydrocele. The neck of the sac was closed with sutures as high up as possible and the walls of the inguinal canal brought together.

On the tenth day the patient was discharged cured.

This observation proves the persistence of the canal of Nück which some authors deny.

A similar case is reported[1] by Dr. R. A. D. King, of Compton, Quebec. A woman of 38, about a month ago discovered a small enlargement just below Poupart's ligament, which became sore and painful. This gradually becoming larger, she consulted a physician of her town, who recommended poulticing, and she kept on the flax-seed poultices up to date. The tension increased, but the soreness diminished somewhat. The tumor was very tense upon her standing up, but became softer when she was in the recumbent position. The writer could not employ the light test, but he felt quite sure that it was not an abscess, an ordinary hernia, or an epiplocele, and decided to test the matter with a hypodermic needle. This he did, and drew off four ounces of hydrocele fluid. There was evidently more than one cyst, as he had to partially withdraw the needle and re-insert it before getting all the fluid. The neck of the sac could be traced upwards with the finger, and while standing the bag was broadest at the most dependent part.

The fluid drawn off was of a straw color, the last ounce being thicker, much the same in appearance as that taken from the pleura at a second aspiration—sticky and albuminous—the final drachm being bloody, probably from a prick of the needle's point.

After satisfying himself that all the contents were withdrawn, he applied camphor and chloral solution to allay the aching, dragging pain experienced.

Dr. King has not seen a similar case in eighteen years of practice.

The following is a case reported[2] by Mr. A Hirst: "The patient is married, and pregnant a third time. Until within a few months nothing abnormal occurred; since, a swelling gradually appeared in the labium on the left side, and, when I first saw it, ten days since, was about the size that an ordinary scrotal hydrocele in the male is when one's attention is first called to it. The tumor was translucent, fluctuating, and distinctly circumscribed, with no impulse on coughing or other indications of hernia. Seven days since I introduced a fine trocar and canula into it. On withdrawing the trocar about six ounces of fluid escaped, and the tumor entirely collapsed. The patient being well advanced in pregnancy, I did not think it advisable to inject tincture of iodine into the sac, as I should have done had it been otherwise."

Rabagliati (A.) on Hypospadias in the Female; Operation; Cure. — E. D., aged twenty-four, was admitted an in-patient of the Bradford Infirmary, in March, 1887, and remained in until October 28th. She complained of incontinence of urine, saying that she had not proper control over the bladder, and that the urine dribbled from her more or less constantly, but that the dribbling was worse at some times than others. This condition had lasted for some years, but was getting worse of late. Medical measures being inefficient, an examination of the parts was made. When a Sims speculum was passed into the vagina the upper surface of the urethra was seen for half an inch. It was red and prolapsed. Patient had seemingly no control over the flow of urine, as it came away in gushes while the speculum was in the vagina. After the menstrual period was over, on May 4th, patient was put under ether, when a catheter was passed into the bladder, and the margins of the urethra pared on the under surface. The urethral mucous membrane was then brought into apposition, edge to edge, with chromic gut sutures, and the vaginal surfaces also brought together. On May 8th the patient was found to be able to retain her urine

[1] *Canada Lancet*, Nov., 1886.

[2] *Brit. Med. Jour.*, Sept. 3, 1887.

and control her bladder. On the 12th an aperient was administered. The urethra was found to be lengthened by half an inch. On the 16th the läst stitch was removed, and on May 24th the patient left hospital with full control over her bladder. When seen a month later she was quite well.—*Br. Med. Jour.*, Sept. 17, 1887.

Precocious Menstruation. — Roulin records[1] the following remarkable case: He attended the mother of the child in this her third confinement, the child being a well-formed girl, weighing seven or eight pounds. All went on well until the evening of the fifth day, when, on unswathing the child, the nurse perceived small spots of blood upon the couch. Examination revealed the fact that the blood came from the vulva and vagina. In all other respects the child seemed perfectly well. On the third day the bloody discharge had ceased, but attention was attracted to the breasts. The left was swollen, sensitive, and reddened; with all indications of commencing abscess. The right, also, was swollen, but of normal color. Both glands gave milk. In two days the normal condition of things was restored, the child not having lost any weight during the time, but, on the other hand, having gained an ounce a day.

A less precocious case, but one in which the premature discharge remained periodic and regular, is reported[2] by Dr. C. P. Barnes, of Massillon, O.

Ellen B., American-born, but of German parents, residing in this city, eleven years old, weight 120 pounds, began menstruating when sixteen months old, and has continued to do so regularly every month up to present time. The flow formerly lasted from two to four days, but, of late, it lasts from five to seven days. The mammæ are much larger than they should be at her age, but not as large as in adult women. There is no growth of hair on the pubes. The girl is physically strong and healthy; she is not tall, but has large bones, and is plump and heavily built. Mentally she is weak, or deficient. Her parents say her memory is not good, and she cannot learn at school as other children do. The parents are honest, reliable, well-to-do people, having had a family of eight children—five girls living, older than this one, all apparently healthy; and two boys living and healthy.

Gow (W. J.) on Peritonitis Ante-Partum.—The patient was a stout, well-made woman, aged thirty-two, who had had eight children previously, the labors in all these cases being natural. She was seen for the first time on the morning of May 9th. She complained of frequent, sharp abdominal pains, not resembling labor pains in character. Her lips and cheeks were livid, and beads of sweat stood on her brow. Her tongue was slightly moist. There was frequent retching. The hands and feet were cold and clammy, and the pulse was barely perceptible at the wrist and could not be counted. The respirations were rapid, being about 40 to the minute. She was quite conscious, and complained of great pain on turning on to her left side. The abdomen was distended, and the fœtus could be plainly felt, apparently within the uterine cavity.

The cervix was soft, the os being dilated to about the size of a five-shilling piece. The membranes were unruptured. The head was felt to be presenting. As she complained of constant desire to pass water with inability to do so, a catheter was passed, and about 1½ oz. of urine drawn off.

The history given by the patient was, that one month previously her right leg slipped through a hole in the floor, nearly as far as the groin, owing to some rotten boards giving way. Since then, she says, she has never felt well. She had reached nearly the full period of gestation, and was expecting to be confined every day. She remained in fairly good health until the evening of May 8th. At 6 P. M. of that evening she was seized with sudden abdominal pain, and vomited. She was visited by one of the students, who found her complaining of abdominal pain and distension. She was belching up wind, but otherwise did not seem seriously ill. The pulse-rate was said to be then about 90. She was ordered some mild carminative.

Considering the desperate state of the patient, it was decided to perform version, and remove the child as rapidly as possible. Before commencing the operation, the patient's abdomen was rapidly auscultated, but the fœtal heart could not be found. The patient was placed on her back, and

[1] Observation on a Case of Precocious Menstruation (Vulvar Hemorrhage) in a Child Five Days Old, *Rev. Méd.-Chir. des Mala. des Femmes*, Nov. 25, 1887.

[2] Very Early Menstruation, *Med. and Surg. Reporter*, Dec. 31, 1887.

version commenced. To subdue the resistance of her abdominal muscles, a few whiffs of chloroform were administered tentatively; but as it made the patient more cyanotic than before, it was discontinued. Just as the knee of the child had been reached, the patient ceased to breathe. In the hope of saving the child, an incision was made into the abdomen.

On opening the peritoneal cavity a large quantity of semi-opaque peritoneal fluid, containing flakes of lymph, escaped. There was no blood in the peritoneal cavity. The uterus was seen covered with flaky lymph. An incision was made into it, and the child extracted about five minutes after the death of the mother. The child's heart was not beating, and all attempts at artificial respiration failed. There was only slight hemorrhage on cutting into the uterus. There was no blood in the uterine cavity. No evidence of rupture of the uterus or other organ was discovered. The inflammation of the peritoneum was most marked over the uterus and in its neighborhood.

No cause for the peritonitis could be found. Death took place fourteen hours after the onset of the symptoms.

In this case there is great difficulty in seeing any etiological connection between the history of the fall and the rapidly fatal peritonitis. The incompleteness of the post-mortem examination renders it impossible absolutely to eliminate various common causes of peritonitis, such as perforation of the vermiform appendix; but no ground of suspicion of any such cause was discovered.

The author finds but three similar cases on record.—*Edinburgh Med. Jour.*, Jan., 1888.

An Improved Pessary.—Dr. Caroline R. Conkey, of Watertown, N. Y., has become dissatisfied with the pessaries ordinarily employed to relieve prolapsus, for the reason that the vaginal walls, after the replacement of the uterus, bag down between the arms and at the sides of the pessary, and finally either push the pessary out, or cause the patient discomfort nearly equal to that of the original complaint.

In order to remedy this disadvantage in the use of the bow-pessary, she has contrived one similar in curve, but of solid rubber from side to side, exclusive of the part which goes behind the cervix, the solid portion being perforated with holes to diminish the weight and allow free drainage. She introduced this five months ago in a case of prolapse, and it has since been worn constantly with the most perfect comfort. In the only other case she has had in the meantime, she used the same pessary, with the same satisfactory result, and she feels justified in recommending it to the use of the profession, because in these cases she had tried all other means unsuccessfully, and found the indications which other pessaries failed to meet supplied in this.—*N. Y. Med. Record*, Jan. 14, 1888.

MISCELLANEOUS.

Brown-Séquard on the Toxic Properties of Expired Air.—The experimenter causes expired air to pass through a worm surrounded by ice, and obtains a liquid which, injected into dogs, in doses of gr. $\frac{1}{60}$, causes at once dilatation of the pupils, a marked diminution of respiration, and a sort of paralysis of the limbs. In doses of gr. iij, the animal invariably succumbs in the space of seven hours.—*Le Courrier Méd.*, January 14, 1888.

Crabb (W. H. S.) on the Language of Twins.—I am acquainted with a couple of twin boys, seven years old, that can understand each other, and although it is impossible for their parents or any other person to understand one word that they say, they make their language intelligible to each other. I also know of twin girls, sixteen years old, that can talk to each other, and to another person their language would convey as little meaning as the ancient Hebrew would to a person who had never learned that language, although the young ladies mentioned can use a great many words common to the English language in talking with other people, but in conversation with each other they use a language of their own invention and peculiar to themselves.

In each of the cases referred to I recommended the separation of the children, so that necessity, the mother of invention, would cause them to use the language of the persons that they come in contact and association with.—*St. Louis Med. and Surg. Jour.*, Jan., 1888.

Knott on the Fever of Over-Exertion.—The author described at some length the train of febrile symptoms which

he had seen in some cases to follow severe prolonged exertion, especially in the laboring classes, who were in bad training for much physical strain. When neglected the symptoms of low fever sometimes existed, and led, after a year or more of lingering disease, to an ultimately fatal result.

The author traced a probable connection between this slow fever and the rheumatic phenomena which sometimes supervene upon a neglected case of simple continued fever. Excess of muscular waste-products were present in the circulation in both cases, and, as Dr. Latham had explained, the development of rheumatism arose from the action of uric acid on the nerve centres, leading in special cases to the secondary development of lactic acid in connection with muscular metabolism; so he (Dr. Knott) would explain the train of symptoms specially described in this communication to the permanent overthrow of the influence of the thermo-taxic nervous mechanism—resulting from the prolonged retention in the circulation of the products of excessive muscular waste. —*Dublin Med. Jour.*, Jan. 1888.

Haw (W. H.) on Hemorrhage in Myxœdema.—S. D——, aged thirty-four, married; three children living, four dead. She dates her illness from a period two years ago, three months after the birth of her last child, when she suffered badly from toothache. The change first appeared in the eyelids, and afterwards "the skin pulled on the face, which felt like to burst." At this time she brought up blood with cough, and "her friends said she was making a blumble in her talking." At the present time (Nov. 16, 1887) her face exhibits the typical myxœdematous appearance: there is a dryness and roughness of the skin of the hands and arms, and she says the skin of the body is similar. For the last twelve months she has had a "bad, salty taste" in the mouth. Her talking improves at times, but is getting worse, and there is a decided tendency to scanning. She becomes very yellow sometimes. The eyelids are thickened; cheeks anæmic, with a pink flush, and soft to the touch. A short time ago "her cheeks were hard for a fortnight." Lips thickened. Six weeks ago she spat up blood with cough. There are no fits but vertical headache and giddiness. There is great listlessness. Her periods are regular in appearance, but too copious. The bowels are regular, teeth are short, bad, and the edges uneven.—*Lancet*, Jan. 7, 1888.

Lautenbach (L. L.) on the Value of Nitroglycerine in Tinnitus Aurium.—In order to learn when to use nitroglycerine I began to give it in private practice to all cases of tinnitus, in which I had found no improvement under other treatment, and in public practice in all cases of tinnitus. In some cases there was improvement; in others there was none.

In the patients where improvement had occurred there was found to be present a similarity of conditions, and I soon satisfied myself that there was a class of patients in which the nitroglycerine treatment was valuable. I found it most serviceable in patients having the tinnitus aurium, without much impairment of hearing, and where but little change had occurred in the naso-pharynx, and where it was found on examination that some abnormal condition of the heart existed, either functional or organic.

In many of these cases more or less structural changes from catarrhal inflammation of the middle ear were present; among them change in the shape and translucency of the drumhead, with accompanying change in appearance or position of the triangular light spot.

Follicular pharyngitis was present in some of the cases. The tinnitus was generally constant, or nearly so. It was not, as a rule, more marked when the patient was in a recumbent position; occasionally there was some remission in that position. The thermometric and barometric conditions of the atmosphere influenced the tinnitus. Damp weather, with low barometer, usually increased it. Dull, heavy headache more or less persistent, and most frequently located in the parietal regions, though sometimes located in the frontal region, was of frequent occurrence. In these cases I used the nitro-glycerine in pill form, and in doses of one-hundredth of a grain. At first but one pill a day was given, generally in the morning. The amount given later was increased, enough of the pills being given to diminish the tinnitus, or to cause headache. As many as six of these pills were given in a day, though usually two were found to produce a beneficial effect. Improvement sometimes was manifest within a day or two after beginning the use of the remedy. In cases of long standing the remedy was sometimes continued for a

period varying from one to three months before a satisfactory result was obtained. Cases in which there was recurrence of the tinnitus seemed to yield more readily on resuming the treatment than when the remedy was first administered. The conclusion which I reached, after a fair trial of this remedy, was that it is of value in certain cases of tinnitus aurium—especially in those where cardiac lesion exists, functional or organic, and where there is little or no loss of hearing.—*Med. Times*, Jan. 1, 1888.

Rowlands (Wm.) on Permanent Suppression of the Salivary Secretion.—The patient is a lady aged sixty, very thin and of a nervous temperament, and although not vigorous has always enjoyed fairly good health. She does not consider that the absence of saliva has made any difference to her general health. She gives the following history. About ten years ago, when in apparently good health, with the exception of a nervous shock caused by the news of the sudden death of a friend, she awoke one morning with an intense dryness of the mouth and throat, which prevented her from speaking or swallowing, and caused a sensation of choking. She found relief by constantly sipping cold water; but the distress was so great that for some nights she was unable to sleep. The discomfort gradually abated, but the tongue and mouth have remained perfectly dry ever since. The tongue has now the appearance of a piece of dry raw beef. There are no signs of papillæ on the anterior surface of the tongue, but the circumvallate are distinguishable.—*Br. Med. Jour.*, Jan. 14, 1888.

Strychnine in Alcoholism.—The good results obtained from strychnine in dipsomania have induced Dr. S. Jaroshevsky (*Meditzinskoiè Obozrenièe*, No. 4, 1887, p. 332,) to undertake an experimental inquiry into the antagonism between the alkaloid and alcohol. From experiments made on dogs, Dr. Jaroshevsky feels justified in drawing the following conclusions: 1. Strychnine undoubtedly neutralizes the intoxicating and narcotic effects of alcohol; 2. It enables large quantities of alcohol to be taken for a considerable stretch of time without causing the usual organic lesions which follow the use of alcohol alone; 3. there are, however, limits beyond which the alkaloid itself becomes injurious to the organism; 4. Therapeutically, strychnine should be used in all forms of alcoholism; 5. It may be regarded as a powerful prophylactic against alcoholism.—*Br. Med. Jour.*, Jan. 14, 1888.

Smith (A. H.) on a New Combination of Cocaine.—"Observing the strong acid property of saccharine, it occurred to me that it could be made to take the place of an acid in combination with the alkaloid cocaine, and thus avoid the extremely bitter and disagreeable taste of the muriate, the salt usually employed. With the aid of Mr. B. Frank Hays, a salt was obtained which is freely soluble in water, and has an agreeable, sweet, fruity taste—a valuable property when the drug is to employed in the throat, especially in the case of children. The molecular number of saccharine (a better name would be *saccharinic acid*) is 183, that of cocaine 303; combined in these proportions, a neutral salt is formed, having about eighty per cent. of the alkaloidal strength of the muriate, a five per cent. solution of the first being equal to a four per cent. solution of the second. Experiments are being made with combinations with other alkaloids."—*N. Y. Med. Record*, Jan. 14, 1888.

Carveth on Cocaine in Malignant Disease of the Bladder.—In a case of malignant disease of the bladder cocaine had been of great service in relieving the sufferings entailed, the patient being unable to sleep on account of the intense pain and the necessity of voiding the urine every few minutes. After emptying and washing out the bladder, he nightly injected into it gr. i. of cocaine, with the result that the urine could be retained three hours at a stretch, and the pain was relieved. Sir Henry Thompson had lately said that morphia could relieve the pain in these cases.—*Canad. Practitioner*, January, 1888.

White (J. E.) on Cocaine Spray in Spasmodic and Inflammatory Croup.—During the past two months a four-per-cent. solution, administered by means of an atomizer, has given me very much satisfaction in the treatment of spasmodic and inflammatory croup among children. Its sedative effects are immediate and gratifying, its astringent property is just what we desire, and its administration easier than that of any other remedy given in any way other than by spraying. In diphtheria the following was prescribed, with much local benefit: Sol. cocaine 4 per cent., ℥ j; listerine, ℥ j. Use with atomizer every one, two, or three hours.—*Canad. Practitioner*, January, 1888.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital.

VOL. V., NO. 6. February 9, 1888. WHOLE NO. 54.

CONTENTS.

	PAGE
Leading Article	65
Pathology	68
Therapeutics	73
Book Notices	76

LEADING ARTICLE.

On the Treatment of Penetrating Wounds of the Abdomen.—MacCormac published, in the *British Medical Journal*, May 14, 1887, a table containing nearly all reported cases of laparotomy for penetrating wounds of the abdomen. He was able to collect eighteen cases of penetrating stab-wounds of the abdomen in which laparotomy was performed or the original wound enlarged. Of these eighteen cases ten recovered and eight died. In four of the ten successful cases there was either no wound of the abdominal viscera or either the mesentery or omentum alone was torn.

Of penetrating gunshot wounds in which laparotomy had been performed he collected thirty cases, seven of which recovered, twenty-two died, and in one case the result was doubtful.

Carson [1] has added to the eighteen cases of stab-wounds eight cases, four of which recovered. To the list of thirty gunshot wounds he adds thirteen, with six recoveries. Of these six cases four were wounds of the intestines, one of the liver, and one of the abdominal wall only. These figures show that operative interference in penetrating wounds of the abdomen has been eagerly adopted since the reports of successful cases were published by Kocher in 1883 and Bull in 1885.

From the reports of discussions on the advisability of operating in penetrating gunshot wounds of the abdomen it is evident that all surgeons would perform laparotomy if they were *positive* that some of the viscera had been wounded. The question constantly being discussed is "What are the indications and contra-indications for operative interference?"

On the one hand Dr. W. T. Bull [2] is in favor of median laparotomy in all cases of penetrating bullet wounds of the anterior abdominal wall, unless there be prolonged shock. On the other hand Dr. E. H. Gregory [3] declares that a penetrating bullet wound of the abdomen is not an indication for laparotomy. He says when there are symptoms so urgent that the patient cannot be made worse—when intense pain, vomiting, and signs of collapse are present—then he would operate.

The majority take the middle ground and wait for symptoms of peritonitis to show themselves before operating, though there is a growing tendency to operate as soon as the patient recovers from the shock of the wound.

An editorial writer in the *Medical News* [4] agrees with Bull that all wounds of the abdominal parietes should be explored, and if penetrating the abdomen should be opened in the median line.

If an exploratory incision is made it should be large enough to allow one to thoroughly examine the viscera. The uselessness of a small incision is forcibly shown in the following case [5]:

A boy was wounded in the abdomen by a 22-calibre target rifle. The next day, "on account of urgent symptoms, an ex-

[1] *Jour. Am. Med. Ass'n*, Nov. 5, 1887.

[2] THE ANALECTIC, Feb., 1887.

[3] *Jour. Am. Med. Ass'n*, Jan. 14, 1888.

[4] Dec. 3, 1887.

[5] *St. Louis Courier of Med.*, vol. xvi., p. 264.

ploratory incision an inch long" was made in the linea alba.

"Nothing was found abnormal except a little blood. It was therefore concluded best to wait." The next day, at the autopsy, it was found that the ball had wounded the liver, mesentery, ascending and transverse colon.

Dr. Lange[1] reported the following case at a meeting of the New York Surgical Society: A boy fourteen years of age accidentally shot himself in the abdomen with a 22-calibre revolver, the ball entering about one and one quarter inches below the umbilicus and one inch to the left of the median line. He was first seen twenty-four hours after the accident. He did not look as if he was suffering from shock. His pulse was 112 to 120, his temperature 101°, and he did not have much pain, although there was marked tenderness on making pressure over the left hypogastrium. There was some tympanites, and the abdominal wall was tense; the breathing was almost entirely costal. The normal liver-dulness was preserved, and there was no change in the ordinary percussion sounds. There was evidently commencing peritonitis, thus far limited to the left hypogastric region.

Laparotomy was performed at once, the abdomen being opened in a line with the point of entrance of the bullet. There was about an ounce of brownish fluid in the cavity, and after the wound had been enlarged to six inches the intestines were lifted out and examined. Seven perforations were found in the intestines. One was already closed. The others were sutured. There was no fæcal matter in the peritoneal cavity. The boy made a good recovery.

Dr. Lange inclined to the opinion that even without an operation the patient would have recovered.

In the discussion following the report of the case Dr. Stimson mentioned two cases in which a bullet had penetrated the abdominal cavity, and in which opium was administered and rest in bed maintained. Both cases recovered.

Dr. Lutz[2] reported a case of laparotomy for bullet wound in which there were eight wounds of the small intestine. The bullet entered just below the umbilicus in the median line. The only symptom mentioned was tympanites. The length of time after the injury before the operation, not stated. The patient was on the operating table four and one half hours. Dr. Lutz calls attention to the difficulty of keeping the intestines properly protected and properly warmed during the time required for suturing them. The patient died.

In the following discussion Dr. Fairbrother reported that he had recently seen two cases of gunshot wound of the abdomen nearly exactly alike in regard to size of bullet and point of entrance of bullet. One was kept in bed with carbolic compresses on the abdomen and recovered. The other was operated on, three wounds of the small intestine sutured, and the patient died.

Dr. J. M. Fox[3] reports a successful case of laparotomy for pistol-shot wound of abdomen which, as the two preceding cases, is not in Carson's tables. The patient was a male, aged eighteen. The bullet entered the abdomen one and a half inches to the left and one inch below the umbilicus. A probe readily passed into cavity. The operation was performed three and one half hours after the receipt of the injury. The general condition was fair.

"No diagnostic symptoms of injury of the viscera were present in this case. Abdominal section was decided upon from the fact that the ball was found to have entered the abdominal cavity."

An incision six and one half inches long was made in the median line. There was a considerable amount of blood but no fæces in the abdominal cavity. The ball had passed through the great omentum, transverse colon, jejunum, and its mesentery. The wounds were closed with silk, about twenty Lembert sutures being used.

There was also a recent invagination found in the ileum. The intestines were kept warm by towels. The cavity was washed out with warm water. The time of operation, including the application of dressing, was one hour and ten minutes. The patient made a good recovery.

Dr. Isaac Warren[4] reports a case which also does not appear in Carson's tables.

The patient was a male, aged eighteen. Bullet, 38 calibre, entered on left side, midway between umbilicus and ante-

[1] *Med. News*, Nov. 26, 1887.
[2] *Jour. Am. Med. Ass'n*, Jan. 14, 1888.
[3] *Med. News*, Nov. 12, 1887.
[4] *N. Y. Med. Jour.*, Sept. 17, 1887.

rior superior spinous process of ilium. When first seen patient was in severe shock. The patient's home was a miserable log-cabin, in which it was impossible to maintain an even temperature, or to raise the temperature above 65° or 70°. It was not possible to operate until twenty-four hours after the injury. An incision was made from umbilicus to symphysis; the intestines were carefully drawn out and wrapped in towels. Five wounds of small intestine were found and sutured, and two of the mesentery. When the cavity was opened a general peritonitis was observed. Operation lasted one hour and three quarters. Patient recovered from ether well, but died, fourteen hours after the operation, from exhaustion. No post-mortem was held.

Dr. A. S. Priddy[1] adds the following interesting case:

Male, aged sixty years, shot with a 32-calibre revolver at short range. One ball entered the thigh, one entered the abdominal cavity one half inch below the anterior superior spinous process of ilium (on which side not stated).

After being shot patient rode four miles on horseback to his home. He was then in profound shock. He was put to bed and opium given, after which he rallied somewhat. For three days he had hiccough, dyspnœa, vomiting, and moderate rise of temperature, with constipation.

On the third day a cathartic was given, causing free evacuation, the stools containing blood. The tympanites disappeared for twenty-four hours.

On the fourth day first seen by Dr. Priddy. On the morning of the fifth day, in his home, a negro's log-cabin, laparatomy was performed. Antiseptic precautions were taken. An incision was made in the median line from umbilicus to symphysis, allowing the escape of a considerable amount of pus and bloody serum, which had a strongly fæcal odor. There was a small amount of pus in the cavity. Besides a wound of the meso-colon, there was a longitudinal wound of descending colon about six inches long, through which a hand was passed into the rectum. This wound was closed with gut sutures. The abdominal cavity was washed out with a 1–1500 bichloride of mercury solution and carefully wiped. The operation lasted fifty-five minutes, but was hurried at the last, as the patient began to rapidly sink. A drainage tube was left in wound.

The history of the convalescence is fully reported, and can be read with much interest in the original article.

In the *British Medical Journal* for November 24, 1887, Mr. Barker reports two operations for penetrating wounds of the abdomen. In one case the omentum only was injured. In the other the ileum was wounded in two places, and a small portion resected. Both patients were nearly well at the time of the report.

From these recent cases we learn that laparotomy for a penetrating bullet-wound of the abdomen may be successfully performed even when the condition of the patient and his surroundings are most unfavorable.

The present views of the majority of surgeons in regard to bullet-wounds of the abdomen, gathered from the literature of the past few months, seem to be as follows:

First. A person having received a penetrating bullet-wound of the abdomen, with probable wounding of a viscus, *may* recover without operation.[2]

Second. The wound in the abdominal wall should not be explored unless one is prepared to perform laparotomy if the wound proves to be a penetrating one.

Third. Long-continued shock is a contra-indication. Peritonitis is not a contra-indication, but it renders the operation much more difficult.

Fourth. If laparotomy is performed the incision should be a free one in the linea alba.

As the shock of the operation is due largely to the exposure of the intestines to the air, care should be taken to have as small an amount as possible out of the abdominal cavity at any one time.

The more practice the operator has had with intra-abdominal manipulations, and the more efficient assistance at hand, the better are the chances of a successful result.

The editorial in the *Medical News*, referred to previously, says: "In stab-wounds the lesion must be limited to the region of the wound, hence it is not necessary to perform median section, and make an extensive examination of the bowels."

[1] *Jour. Am. Med. Ass'n*, Nov. 19, 1887.

[2] Dr. Mudd, among others, holds this view. See *St. Louis Courier of Med.*, Jan., 1888.

Dr. J. B. Roberts,[1] replying to this statement, says that his experience teaches him that long knives or stilettos are as liable to injure the intestines in several places as is a bullet. In these cases, too, he thinks, in place of enlarging the original wound, one should make an incision in the linea alba. In one case he enlarged the original wound, and with some difficulty bound and sutured two wounds. The patient died; and on post-mortem examination, a third wound was discovered, which he failed to find at the time of operation. In a second case he at once made a median incision, readily explored the cavity, sutured the wounds, and the patient recovered.

Dr. T. G. Morton[2] reports a case in which he followed the same procedure. The knife entered on the left side, midway between the umbilicus and anterior superior spinous process of the ilium. A mass of omentum protruded. He made a median incision four and one half inches long, and carefully examined the intestines. No lesion was found. The patient promptly recovered.

Dr. Chas. Ball[3] records the following case:

A boy accidentally stabbed himself in the abdomen with a half-inch chisel. The blade entered half-way between the tip of the ensiform cartilage and the umbilicus. Four hours after the accident he was seen by Dr. Ball. Profound collapse, vomiting of blood, and with the vomiting, blood was forced through the wound; abdomen dull on percussion. Incision made in median line three inches long; a large amount of blood filled the peritoneal cavity. There was a wound of the greater curvature of the stomach, which was sutured, and a wound of a vein of the meso-colon, which was ligated. The patient made a good recovery.

Dr. Morton's case illustrates one manner of treating stab-wounds which are penetrating. The knife entered the abdomen, and that fact without symptoms of intra-peritoneal injury, is taken to be an indication for exploratory laparotomy.

In Dr. Ball's case there were positive signs that the alimentary tract had been wounded, and prompt operative interference was followed by the recovery of the patient, who otherwise would have died.

Other similar cases are reported, and the treatment of stab-wounds is to be conducted on the same plan as that of penetrating bullet-wounds. There can be, however, no rule that fits every case, and the surgeon must decide each upon its own symptoms, and be guided by the surroundings of the patient.

G. B. PHELPS, M.D.

[1] *Med. News*, Dec. 10, 1887.
[2] *Med. News*, Nov. 26, 1887.

PATHOLOGY.

The Association of Fibroid and Aneurismal Disease of the Heart with Disease of the Coronary Arteries.—The connection between cardiac and coronary disease has never been as definite as it should be, for two reasons: In the first place a thorough examination of the coronary arteries is not a routine part of many autopsies, and in the second place there has always been much diversity of opinion among anatomists as to the ultimate termination of these arteries. Opinion is about equally divided among equally good men as to whether the coronary arteries anastomose freely or sparsely (if at all).

Dr. John L. Stephen has most recently studied the subject and, in an experimental and clinical paper on the subject, says[4]:

"I think it must be admitted that inosculations do exist between the coronary arteries of the heart, but that these are any thing like so large and numerous or of so much importance in maintaining the vitality of the heart when a branch is plugged, is, I think, much to be doubted. So far as my experience goes, I would say that the arterial inosculations are so trifling and so far apart from one another that they are quite unable to compensate for vascular obstructions, except in their immediate neighborhood, and even there only after very considerable destruction of cardiac tissue has occurred. To be of any service in the way of restoring circulation after obstruction, the anastomoses would need to take place through the medium of primary and secondary branches."

In the clinical part of his paper, in which he narrates sixteen cases, the author clearly proves the dependence of fibroid degeneration of the heart wall upon obstruction of a coronary artery. From fibroid degenera-

[3] *Brit. Med. Jour.*, Jan. 14, 1888.
[4] *Lancet*, Dec. 17, 1887.

tion to an aneurismal condition is but a step, and yet here, arterial disease is not always discovered, as the following case,[1] reported by Rendu, shows.

A man of forty-nine entered the Neckar Hospital with all the appearances of advanced renal or cardiac disease. His trouble dated back two years, when he suffered from dyspnœa and palpitation and was said to have had pericarditis. On entering the hospital he had decided albuminuria, polyuria, dyspnœa, œdema of the legs, and anasarca.

He had no cardiac murmur. The heart was large, but its impulse was feeble. Repeated purgation and digitalis improved matters somewhat.

On post-mortem there were found very firm old adhesions between the pericardium and a part of the anterior surface of the left ventricle. Directly underlying this adherent patch was an aneurismal pouch in the ventricular wall the size of a pigeon's egg partly filled by a laminated clot. At the thinnest part the myocardium had entirely disappeared, leaving the endo- and pericardium in apposition. No arteritis or atheroma of the coronary arteries was discoverable.

From the wording of the article, of which the above is an abstract, it would seem probable that a gross atheromatous condition only was looked for, whereas we all know that an easily overlooked endarteritis is much more likely to give rise to necrotic or degenerative changes in the tributary region.

It is often customary to exclude atheroma of the visceral arteries (cerebral or cardiac), because of the absence of similar changes in accessible peripheral vessels. The fallacy of this deduction is shown by the following case,[2] reported by Dr. Robert Tilley, of Chicago.

A man of fifty-seven complained of general malaise, and wandering pains over the chest and into the left shoulder and down the left arm. Moderate exercise would cause these bad feelings to disappear.

Six weeks after he was first seen he began to be troubled by cough and dyspnœa. The pulse was 120, feeble but regular, and no murmur was distinguishable, but in systole the heart sounded "as though shutting down on a pledget of wool." The pain became severe and angina-like, and relieved most by nitro-glycerine, $\frac{1}{100}$th grain. An œdema invaded the feet, and crept upwards gradually to the hips, abdomen, and chest. About nine weeks after the acute attacks commenced, while walking across the room, the patient suddenly fell dead.

At the autopsy the heart was somewhat enlarged, the valves were competent, and there was little or no atheroma, except in the coronary arteries, one of which was almost completely occluded. It was just below this occluded spot that, in the wall of the left ventricle near the apex, the aneurism had developed. It was the size of a large walnut, and at its thinnest part only about two millimetres thick.

Dr. Maguire has reported[3] a case of interstitial aneurism of the interauricular septum. The aortic valve was stenosed, and the cusps much thickened by inflammatory growth and covered with fibrin, in which no micrococci could be found. Anterior to and below the foramen ovale a cyst filled with partly disorganized clot was found, which turned out to be really an aneurism. There was some ulceration below the aortic valve, which communicated by a narrow fissure with the cavity of the aneurism. The precise mode of origin was doubtful. As affecting a part of the body rarely the seat of morbid changes, the specimen was of much interest.

This was a very unusual site for a cardiac aneurism of the chronic, fibroid variety, and we surmise, considering the existence of fibrin on the aortic valves, that the aneurism was of the acute variety, *i. e.*, a necrotic process depending on embolism.

This acute process sometimes proves fatal by rupture of the heart before an aneurism can be formed, as the following case reported[4] by Dr. Steven shows: a man of seventy-nine was seized with severe præcordial pain in the morning while asleep in bed. When seen he was cold and blue; the pulse was rapid, feeble, and irregular; and the cardiac sounds were very distant and feeble. The first attack abated somewhat, but about 5 P.M. of the same day he had another, and died in an hour and a half.

At the necropsy the pericardium was found filled with thin bloody serum, while

[1] *L'Union Médicale*, Dec. 13, 1887.
[2] *Jour. Am. Med. Ass'n*, Oct. 1, 1887.
[3] *Lancet*, May 7, 1887.
[4] *Lancet*, Dec. 31, 1887.

around the heart itself was a layer of clot. A small rupture was found in the anterior wall of the left ventricle close to the septum, and about two inches above the apex. The fatty envelope of the organ was much increased, and the wall of the right ventricle was very thin. The wall of the aorta presented almost no trace of disease, but both coronary arteries were very seriously affected. The descending branch of the left coronary was rigid in almost its whole extent. About an inch and a half above the level of the rupture several transverse thickenings were observed, which slightly narrowed the lumen of the vessel. At the level of the rupture the calibre of the vessel was very considerably diminished by the presence of a thick calcareous concretion about one inch in length, which could be shelled out from between the coats of the vessel. The right coronary was also exceedingly calcareous. No detailed or microscopic examination of the muscular tissue of the organ was possible, as very considerable decomposition had set in before it was examined.

A somewhat similar case is reported [1] by Mr. W. C. Adams.

Trévoux, in the *Arch. de Phys. Norm. et Path.*, vol. ix., No. 4, records [2] a case of aneurismal dilatation of the vessels of the pillars of the heart. The heart on which these observations was made was taken from the body of a female, aged twenty-seven, dead of acute yellow atrophy of the liver. The pillars of the left ventricle presented the appearance of empty flattened vessels; some of the largest gave the sensation to the fingers of tubes with soft walls. and on section all presented central cavities whose walls collapsed like those of a vein. In some places the muscular tissue of the pillars seemed to have entirely disappeared, in others remnants were left. Under the microscope the pillars were shown to be the seat of an advanced sclerosis, and possessed cavities containing blood. The muscular and external coats of the vessels were badly marked, especially the former, but they were obviously arteries. The lesion, then, was arterial and apparently aneurismal. Dilatation more or less irregular of the vessels, disappearance of the muscular and external tissues, thickening of the interna, and formation of ampullæ and culs-de-sac on the vessels were the salient features. Added to these were interstitial sclerosis and atrophy of the pillars. The dilatation of the vessels appeared to follow *pari passu* with the sclerosis of the pillars.

Fibroid patches in the walls of the heart, unaccompanied by marked coronary disease, are generally multiple, and are suggestive of syphilis.[3] A recent case, reported [4] by Mr. Ashby, is instructive in this connection.

A woman, aged thirty-seven, died suddenly. Nothing was known of her previous history except that she was subject to fits and was said to be a great smoker. She earned her living by "charing." All organs except the heart were normal; there was no evidence of syphilis of the brain or liver; the heart was of normal size, but it was pale and flabby. On cutting into the walls it was found that the muscle was infiltrated with white diffused patches, evidently more or less fibroid in character, in other places softer, but firmer than the substance of a sarcoma; scraping did not yield a milky juice. Microscopically these patches consisted of round cells, running in between the muscular fibres, spindle cells, and fibre tissue. It had not the appearance of a round-celled sarcoma, but rather that of a growth, which was probably syphilitic. The arteries in places were thickened. Dr. Dreschfeld also expressed an opinion that it was syphilitic.

Gaucher on Experimental Nephritis.—The author states it as his opinion that parenchymatous nephritis, the large white kidney, has often a toxic origin. He refers to Bright's disease of the primary variety, which develops slowly and insidiously with no well-defined causation. The poison causing this disease, however, is not from without, but is produced within the organism.

This poison is complex and composed of various extractive matters, which result from the incomplete oxidation of nitrogenous substances.

If there is injected subcutaneously, in a guinea-pig, for a number of days, an increasing amount of creatine or leucine or tyrosine, of creatinine, of xanthine or hypoxanthine in aqueous solution, the animal develops albuminuria and finally dies with

[1] *Lancet*, Oct. 1, 1887.
[2] *London Med Record*, Aug. 15, 1887.
[3] A case of syphiloma of the heart was reported in THE MEDICAL ANALECTIC for March, 1887, p. 133.
[4] *Br. Med. Jour.*, Nov. 19, 1887.

a parenchymatous nephritis, with a large white kidney.

The extractive matters accumulate in the blood, are eliminated through the kidneys, irritate the secreting epithelium, and excite a parenchymatous nephritis. All these extractive matters are present in the blood in very small amounts in health, but are very much increased in many pathological states.

Hepatic diseases particularly interfere with the transformation of nitrogenous substances, and extractive matters increase as the quantity of urea excreted diminishes. This explains the renal changes seen in cases of cirrhosis, parenchymatous hepatitis, and acute yellow atrophy. All chronic diseases, where grave disturbances of nutrition exist and where imperfect oxidation of nitrogenous material takes place, may give rise to this same renal change.

Very many ordinary foods, beef-tea notably, contain imperfectly oxidized nitrogenous substances, and the same is true of meat extracts and powders. The use of foods rich in extractive matters may, therefore, be very harmful, particularly where the kidneys are not acting well, or the elimination of toxic substances is impeded. The increased ingestion or excessive production of extractive matters is capable of exciting a parenchymatous nephritis; but if a chronic nephritis exists already, it is much aggravated. It is probable that in this way a parenchymatous is engrafted upon an interstitial lesion, and the common chronic diffuse nephritis results.

From these experimental results a very important therapeutic precept may be deduced. It is the danger of giving beef-tea in nephritis. For Brighty patients bouillon is a poisonous solution. There is equally, in all patients and even in healthy people, the same danger in extracts of meat, concentrated bouillon, and powders of beef, which, aside from their toxic mineral ingredients, principally potash salts, contain organic poisons and all the above-mentioned harmful excrementitious matters.

In chronic diseases there are constant disturbances of nutrition; in fevers the same; with incomplete transformation of food, and abnormal production of extractive matters. If we give as food toxic substances in addition to that already in the economy we run danger, which is more profound in proportion as the function of the kidney is impaired.—*La France Méd.*, Jan. 17, 1888.

Mills (B. L.) on a Case of Hydrophobia One Year and Nine Months after the Bite of a Monkey.—The previous health of the patient, a corporal in the Indian service, was good; latterly the patient had been drinking heavily, chiefly a native spirit called "daku."

In August, 1885, a tame monkey stole some of his breakfast, and while chasing it he was bitten in the hand. Next day the monkey again stole from another soldier, who killed the monkey, so that its state of health cannot be ascertained.

On admission into hospital at 5 P.M. on the 7th of May, 1887, Corporal P. stated that he had been suffering from ague and vomiting for the last three days, and he also complained of pain and a constricted feeling in his chest. His temperature was 101° F. He was given a diaphoretic mixture. On the 8th of May he passed a quiet day. His temperature was 100° F., and he was given ten grains of quinine. The pain in the chest remained the same. About 9 P.M. he began to complain of difficulty in his breathing, and was nervous and excited. He was given a sedative draught of chloral and bromide of potassium, and then first noticed that he had difficulty in swallowing, and complained of a feeling of fulness and stiffness in the throat, but he managed to swallow most of his draught. About 11:30 P.M. he became very restless, and was unable to lie down as a difficulty in breathing came on when he did so. He got about an hour's sleep through the night.

Early in the morning of May 9th, while attempting to wash himself, he became very nervous and excited, and utterly failed in his attempt; and at once a severe spasm of his pharyngeal and laryngeal muscles occurred, and much increased difficulty of breathing. At 7 A.M. he was very excited, and his pupils were widely dilated. On being questioned he very strongly denied ever having been bitten by any animal, and it was not until a few days after his death that the man who killed the monkey came and informed me of the circumstances of the bite.

The spasmodic attacks continued, and were brought on by any noise; and he complained much of the weight of his bedclothes, though he had only a sheet over him. He was moved into a darkened, iso-

lated ward, where for a little while he seemed better. Though it was very hot (94° F. in the ward), he was unable to bear the air from the punkah, which had to be stopped, as he said it made his breathing worse. At 1 P.M. he had slight opisthotonos. The difficulty in swallowing increased. His breathing was very shallow and hurried. His voice became changed and hoarse, and he began with great difficulty to spit up viscid mucus. He was quite intelligent throughout his illness. In one severe spasm urine and fæces were passed involuntarily. At 5:50 P.M. he suddenly leant forward, and after a prolonged spasm fell back dead apparently from spasm of the glottis.

Large doses of chloral and bromide of potassium were given as long as he was able to swallow. Cold to the spine was tried without any effect. Morphia hypodermically and nutrient enemata. No curare was to be obtained.

Post-mortem Appearance Twelve Hours after Death. — Rigor mortis extremely marked; risus sardonicus also well marked; body well nourished; no marks of scars; cutaneous hypostasis very marked on lower surface of body.

The pericardium contained one ounce of straw-colored serum, and numerous small ecchymoses were noticed on its surface. The heart was normal, and contained fluid blood. Both lungs were slightly congested; the left was adherent in two places to the chest-wall. No pleural ecchymoses.

The liver weighed fifty ounces. The gall-bladder was full of bile, and the liver substance bile-stained. The spleen was enlarged; weight, fourteen ounces, and rather friable. The kidneys were congested. The stomach contained six ounces of bile-stained fluid. The intestines were normal. The brain weighed fifty ounces. The dura mater was not adherent. There was slight congestion of the surface and substance of the brain. The spinal cord was much congested, especially in the cervical region, both on the surface and on section. There was no effusion on the membranes of the cord.

The author has not been able to find any record of hydrophobia following the bite of a monkey. The duration of the latent stage was very remarkable. In 147 authenticated cases the duration of the latent stage was less than six months, except in nine cases, where it was longer. There were no morbid appearances at the seat of the bite, and no pain in the hand or arm, and no scar even could be detected. The case was more rapidly fatal than the majority, and death did not take place from exhaustion.—*Edinburgh Med. Jour.*, Jan., 1888.

Troisier on Enlargement of the Supra-Clavicular Lymphatics in Cancerous Disease of Abdominal Viscera. —The author has already[1] called attention to the enlargement of the supra-clavicular lymphatics in both supra- and infra-diaphragmatic cancer. He now calls attention to three cases of utero-ovarian cancer in which this sign was present.

The clinical value of this sign, if constant, need not be emphasized. In some cases the author thinks the propagation is from gland to gland along the pre-vertebral ganglia; in other cases it may arise from secondary nodules in the lungs.—*La France Méd.*, Jan. 17, 1888.

Owen (E.) on Sporadic Cretinism. —The child, aged five and a half, had been born of healthy parents. She looked about three or four years younger than her actual age. She had been weaned at three years, but was still fed from the bottle. Amongst the chief clinical features were the large mouth and protruding tongue, and the absence of all trace of thyroid gland; the presence of diffuse tumors over the subclavian triangles, and of large and rounded limbs. The child could not walk or stand, neither could she speak. Reference was made to a valuable paper which was contributed nearly forty years ago by Mr. Curling on two similar cases, in which he suggested that the physical and intellectual defects in those children were probably due to absence of the thyroid gland depriving the economy of certain assimilative processes. Mr. Owen then referred to the work of Kocher, Ord, and Horsley upon the subject of cretinism, which he called the myxœdema of childhood. He was of opinion that the characteristic deposits in the neck, as also those which shrouded the muscles of and thickened the limbs, were the result of mucoid infiltration of the subcutaneous tissue, and not of the nature of fat. He concluded by calling attention to the importance of Mr. Horsley's vivisection experiments upon monkeys, by which it had been amply shown that the removal of the

[1] MEDICAL ANALECTIC, 1887, p. 183.

entire gland was likely to be followed by progressive myxœdema.—*Br. Med. Jour.*, Jan. 21, 1888.

Parker (W. R.) on Hydatids in the Cavity and Substance of the Heart.—A few days ago I was called in to see a little fellow, five years old, whose life had suddenly become extinct within a few moments of his playing about in almost perfect health. He had once, two or three weeks previously, and again nearly a week ago, complained of a slight pain about the heart, but little notice was taken of a matter apparently so trivial. On August 1st he again made a similar complaint, and his father imagined he felt the child's heart beating a good deal quicker, if not more vigorously, than it should do. However, he played about with his ball, and helped his mother at the pump, and then sat playing on the sofa, when he suddenly uttered a scream, turned over on one side, and in a few moments was dead.

On opening the pericardium, the front wall of the right ventricle, near the base, was found bulged out by an hydatid, giving the appearance of another auricle. An incision was made into this, passing first through the ventricular wall, then through a tough adventitious sac about one fifth of an inch thick, firmly adherent to the muscular substance, and rough inside like pericarditic lymph; the delicate mother cyst within this contained fresh blood-clot and eight or more daughter cysts (mostly pyriform or ovoid in shape, and varying in size from small currants to small beans), and had evidently attained a diameter of nearly one inch and a half before rupturing into the right ventricle; about the rupture the endocardium seemed rough and fibrinous.

On raising the heart and detaching it by cutting through the large vessels, there flopped out of the left auricle a simple hydatid cyst, measuring one inch and a half in diameter, which must have occupied almost the entire space of the auricle.

No hydatids were found elsewhere, but only a superficial examination of the other organs was made.—*Br. Med. Jour.*, Sept. 3, 1887.

Penetrating Gunshot Wounds of the Chest.—Dr. Gouzier has published some observations and statistics regarding the penetrating gunshot wounds of the chest occurring in the French expeditions to Formosa and Tonquin in 1883–85. From his work we gather that such wounds showed a mortality of ten per cent., which is only about a sixth of that due to similar wounds in recent European wars and in the American war. Apparently, as he suggests, the general employment of antiseptic methods was the cause of this great amelioration. Chest wounds from revolver balls of seven millimetres in diameter generally proved comparatively harmless. Traumatic pleurisy and pneumonia usually terminated favorably, but hemorrhage, empyema, and compound fracture of the ribs gave much more serious results. He found that the best practice was not to explore unless it was necessary to extract the ball, and not to attempt extraction unless the ball was just beneath the skin or was setting up dangerous complications. In ordinary cases he found the best plan was to close the wound antiseptically; but if there were empyema, to make a counter-opening and to wash out and drain the pleural cavity. Warm antiseptic baths were also found very useful in Tonquin.—*Lancet*, Jan. 7, 1888.

THERAPEUTICS.

Haig (A.) on Treatment of the Paroxysm of Migraine by Acids.—The author has shown that a certain form of headache is closely connected in time with a large excretion of uric acid. This headache is really a member of the class commonly known as migraine or sick headache. During this headache, uric acid is excreted in excess in the urine, and probably also exists in excess in the blood. It is quite possible to stop this excess in the urine, and also in the blood, by means of acids.

The acid used is not of much consequence; citric or nitro-hydrochloric are equally good; the only point is that the dose must be sufficiently large, especially if, as is often the case, the headache is going on during the alkaline tide of digestion. A dose commonly successful is forty to sixty minims of dilute nitro-hydrochloric acid in a tumbler of water, one half to be taken at once, and the rest in thirty or forty minutes; the headache is generally much better within an hour, and quite gone within an hour and a half from the first dose. If the urine is alkaline, or very slightly acid before this treatment is begun, or if the patient has previously been taking alkalies, a third dose of twenty minims of

the acid may be necessary; but it is rarely necessary to go beyond one drachm of nitro-hydrochloric acid. An equivalent dose of citric acid, taken as strong lemonade, will do as well, or of any acid that may be preferred, provided it raises the acidity of the urine. It is also possible to reverse the process, and, by giving alkalies, to bring the headache on or increase it.

The above refers entirely to the treatment of the paroxysm; a diet without butcher's meat, beer, wine, etc., is the best preventive treatment.

If acids, properly and carefully given as above, completely fail to relieve, the headache is not migraine, or at least not migraine due to uric acid; and if the urine be tested, probably no uric acid rise will be found corresponding to the headache.—*Br. Med. Jour.*, Jan. 14, 1888.

Hamilton (A. McL.) on the Detection of Concealed Insanity by Nitrous Oxide Gas and other Anæsthetics.—For ten years or more the author has studied the effects of nitrous-oxide gas, besides having used it in a great number of cases, and he has come to regard it not only as very valuable in the treatment of insomnia and allied states, but as a psychopathic agent of the greatest value in hysteria and certain forms of insanity.

Where no suggestion is made, the effect in melancholic cases is usually of an exhilarating kind—not only during the administration, but afterward. In cases of dementia the subjects, when under the influence of the gas, referred to past events, even after a long period of incoherence and apparent vacuity, but when the effects of the gas had passed away the ordinary dulness and mental confusion returned.

The value of nitrous-oxide gas as a means of diagnosis was suggested accidentally by a case of insanity with concealed delusions. It was invariably found, when the patients studiously avoided betraying their mental weakness from fear of asylum detention or commitment, or when there was no such restraint,—in the one case the simple suggestion of the suspected condition, and in the other the mere establishment of the first grade of intoxication,—that they would give prompt expression of not only delusions, but sometimes hallucinaitons. The particular form of monomonia would be intensified, and even new applications of the dominant false idea would be made.

Two illustrative cases were cited, in one of which delusions of persecution were discovered, and in the other a diagnosis of religious melancholia was reached only by inducing primary anæsthesia by nitrous-oxide gas. The patient remembers nothing of his behavior under the anæsthetic.

The author believes that by this method many lives could be saved and much mischief averted by the early recognition of suicidal and homicidal delusions in persons now at large. Although he has not tried it in puerperal insanity of the light type, he believes it will often reveal the delusions and mental states which so often result in explosive acts of violence, and which lead to infanticide—a crime which is so often supposed by ignorant juries to bring with it responsibility when such is not the case.—*N. Y. Med. Jour.*, Jan. 28, 1888.

Schenck (W. L.) on Ipecac in Delirium Tremens.—At 3 A.M., December 9th, was called to see E. E—. His countenance was animated with anxious apprehension, eyes fixed and eager, though constantly turned to new objects; patient going from room to room, tortured by hallucinations of vision; pulse and respiration in harmony with his mental excitement and physical exertion; body bathed with perspiration; nervous, tremulous; tongue heavily coated with a yellow fur; and insomnia complete. Gave a hypodermic injection of morphine, grs. $\frac{1}{4}$, atropine, gr. $\frac{1}{60}$, and prescribed chloral hydrate and bromide potassium, of each one scruple p. r. n.

Called at 9 A.M., and found no change. Gave ten drops of fluid extract ipecac (Squibb's) every fifteen minutes. After the second dose the patient became calm and easily controlled, and vomited freely after the fourth, when directions were left for two drops every thirty minutes.

Called at 1 P.M., and found the patient calm but greatly depressed; ordered elixir valerianate of ammonia, to be repeated as required, beef broth, egg-nogg, etc., and discontinued the ipecac.

Called at 9 P.M., and found him in much the same condition as when first seen. Prescribed ipecacuanha as in the morning. After the first dose he became rational, and after the third vomited freely and went to sleep, not waking until three o'clock, when he took chloral and bromide (a half-drachm of each), and in a few moments fell asleep again, and slept soundly

until 9 A.M., when he awoke free from delirium, ate his breakfast with relish, and has since steadily improved, with no return of the disease.

On January 2, 1865, I found a patient wild by delirium with a tendency to violence. Gave him twenty grains of powdered ipecac every fifteen minutes until two drachms had been taken. No emesis was produced, but the delirium was almost wholly relieved. On becoming conscious and finding an emetic had been taken, he insisted upon drinking half a pint of warm brine, and tickling his fauces with a feather to asist its operation. After emptying his stomach, he slept the remainder of the night and had but a slight return of the delirium.[1]—*Kansas City Medical Index*, Jan., 1888.

The Internal Administration of Bichloride of Mercury as an Adjunct to the Local Treatment of Circumuterine Inflammations.—From the author's observations the following conclusions seem warranted:

The use of bichloride of mercury internally forms a valuable aid to the local treatment of circumuterine inflammations.

In the doses necessary for its resolvent effect, from $\frac{1}{64}$ to $\frac{1}{16}$ gr., the drug may be given for several weeks without any untoward constitutional manifestations.

In some cases, where the inflammatory products are deeply situated within the pelvis, the internal use of the drug seems to be more efficacious than the most approved local treatment.

A short course of the drug often serves as an important means for the differential diagnosis of the various obscure conditions which give rise to pelvic pain.—*N. Y. Med. Jour.*, Jan. 28, 1888.

A Dangerous Mixture.—Several prescriptions have lately come under my notice in which occurs a mixture of chlorate of potash and syrup of iodide of iron. This seems a not unreasonable combination, and its incompatibility does not suggest itself, nor will it be found on reference to ordinary text-books. As, however, a case has recently been reported from Australia in which death resulted from the administration of such a mixture, I think it desirable that the attention of prescribers and dispensers should be drawn to the fact that chlorate of potash liberates the whole of the iodine from iodide of iron, and, if at all concentrated, the solution soon becomes saturated, and crystals of iodine are deposited after a few hours. The products of the decomposition are shown in the following equation:

$$2FeI_2 + KClO_3 + H_2O = Fe_2O_3, H_2O + 2I_2 + KCl.$$

Heat favors the reaction; and the process, which may be slow in the medicine bottle, would be much more rapid in the stomach, where the development of nascent iodine might produce symptoms of gastric irritation which were neither expected nor desirable.—R. H. Parker, in letter to *Br. Med. Jour.*, Jan. 21, 1888.

Four Hundred and Sixty Grains of Quinine in Twenty-Four Hours.—In the *Medical Index* for September, 1887, page 404, I see the mention of the largest dose of quinine ever given, according to Dr. C. E. F. Knight, of Dublin, to be 131.25 grains in twenty-four hours.

Immediately after the close of the war I took up the practice of medicine in Texas, and was acquainted with the case of one Frank Burns, a barber, who was stricken with a congestive chill. Dr. McIver was called, commenced treatment at eleven o'clock P. M., and before eight o'clock next morning he had given Burns the entire contents of a one-ounce bottle of quinine, except twenty grains which the doctor himself took when he opened the bottle—460 grains in twelve hours—and Burns got well. Very truly, J. M. DUNCAN, M.D.

Baxter Springs, Kans., Dec. 25, 1887.

—Letter to Kansas City *Med. Index*, Jan., 1888.

Cochrane (J.) on Ergotinin in a Case of Hæmoptysis.—I was called to see a middle-aged married woman residing near me, and found her confined to bed and suffering from an attack of pretty severe hæmoptysis. She had been seized with this illness three days previously to my being called in, and, judging from the statements of her husband, she must have lost a considerable quantity of blood. I found her in a weak state and coughing continually, and each time ejected a large amount of bright blood mixed with expectoration. There was no feverishness, but, owing to the coughing, she had been unable to retain much, if any, food in her stomach. Thinking this a favorable case for the administration of ergotinin, I immediately gave a hypodermic injection

[1] This last case was reported in the *N. Y. Med. Jour.*, Oct., 1872.

over the chest, and as soon as this had been done my patient suddenly went off into a state of syncope, and had all the appearance of having suddenly expired; her face assumed a death-like appearance, and I could feel no pulse at the wrist. I immediately slapped her face with cold water, and rubbed her chest. At the same time I told her husband, who was in the room, and who was in a terribly frantic state, to bring me some brandy or whiskey, and also to get some bottles filled with hot water to apply to her feet and legs. Waiting the result anxiously, I was glad to find her beginning to show signs of returning animation, and after a while she gradually opened her eyes. The color also began to return to her face and lips, and then in a few minutes further she vomited freely a quantity of half-digested food mixed with bile. She recovered entirely, and the cough disappeared as well. The bleeding from the lungs also was entirely stopped, and not a drop appeared after the injection. There has been no return of cough or hemorrhage since then, now several months ago, and the patient is going about seemingly in very good health. When called to see her, I found beside the bed a vessel half filled with bright-red blood.—*Lancet*, Jan. 21, 1888.

BOOK NOTICES.

Photographic Illustrations of Skin Diseases. An Atlas and Text-Book Combined.—By George Henry Fox, A.M., M.D., Clinical Professor of Diseases of the Skin, etc., etc. Hand-colored plates; nearly one hundred cases from life. Second Series. Complete in twelve parts. E. B. Treat, New York.

In the announcement the publisher says: "It is now five years since the first appearance of this work. In the present work, which is not merely a revised edition, but a complete remodelling of the original volume, many imperfect plates have been replaced by new and better ones, and the total number increased 20 per cent. The diagnosis and the treatment of skin diseases are especially considered, and the text, consisting of upwards of two hundred pages, is designed as a complete work on Dermatology, a combined atlas and text-book."

To any one who has seen this work all words of praise are unnecessary. To any one who has not seen it it is sufficient to say that from an artistic point of view it is superb, while from a practical point of view it is invaluable for specialist or general practitioner.

It is to be completed in twelve monthly parts; price, per part, $2.

The Medical World Visiting List and Ledger of Monthly Balances.—The Medical World Publishing Co., Philadelphia, Pa.

This visiting list, among other things, has the advantage of being printed and bound in many thin and easily carried booklets, which can be inserted in and removed from a handsome Russia-leather case. It is not, for this reason, so cumbersome as most visiting lists.

The companion to the visiting list is a handsome, indexed book, arranged as a ledger of monthly balances and index of accounts. The two sets of books form a very complete and handy system of book-keeping. The price of the entire set is $2, and if not found satisfactory after three months' use the money will be refunded on the return of the books.

A Manual of Medical Jurisprudence, with Special Reference to Diseases and Injuries of the Nervous System.—By Allan McLane Hamilton, M.D., one of the Consulting Physicians to the Insane Asylums of New York City, etc., etc. Second edition revised, 8vo, pp. 390, price $2.75. E. B. Treat, New York.

This is a practical work, doing away with those long and tiresome details which works on this subject so frequently give; yet all necessary details are given—plain, clear, and concise.

It is very fully illustrated with cases drawn largely from *American* sources, and hence better calculated to meet the wants of *American* physicians and legal advisers—a feature that is not always to be found in similar treatises. The leading chapters embrace Insanity in its Medico-Legal Relations; Hysteroid Condition and Feigned Disease; Epilepsy; Alcoholism; Suicide; Cranial Injuries and Spinal Injuries.

The first chapter defines Insanity, its General Indications, Classification, and Hereditary Influence—Including Post-Mortem Examination of the Insane (with plates of the typical and atypical brain.) Under the Legal Relations of Insanity we have Legal Tests—The Guiteau Case—Physical Tests—Duties of Medical Experts—Tricks of Counsel—Illusions, Hallucinations, and Delusions—Reasoning Mania—Contracts Made by the Insane—Testamentary Capacity—Old Age and Dementia—Undue Influence—Medico-Legal Relations of Aphasia—Marriage and Insanity—Insurance Frauds—Responsibility of Deaf and Dumb—Criminal Responsibility—Responsibility in Relation to Imbecility—English Test of Responsibility; American Decisions on It—The Test of Right and Wrong—Impulsive Insanity—Commitment of Lunatics and State Laws Regulating It—Concealed and Feigned Insanity, etc. The chapters on Cranial and Spinal Injuries are particularly valuable for the numerous decisions cited from our courts in connection with suits for damages from Railroad Collisions, etc.

The Hospital.—An Institutional Journal of Science, Medicine, and Philanthropy.—For Hospitals, Asylums, Medical Practitioners, Students, Nurses, Families, Parishes, Congregations, and the Charitable Public. New Series. Published Monthly. Price, Sixpence. Alexander P. Watt, Publisher, London. Agents for America, The International News Co., New York.

The scope of the journal is sufficiently outlined in its title. It is a journal with a large 8vo page, printed in double columns, replete with material of interest to philanthropists and to laymen and women interested in public charities and hospitals.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital.

VOL. V., NO. 7. February 16, 1888. WHOLE NO. 55.

CONTENTS.

	PAGE
Leading Article	77
General Medicine and Pathology	82
Miscellaneous	86
Book Notice	88

LEADING ARTICLE.

On Some of the Medicinal Uses of Coca.—Preparations of coca have now been long enough in use to demonstrate their applicability to medicine and surgery. Like all other new and potent drugs, it excited hopes which were in many instances not realized, and its careless or ignorant use has often been followed by alarming symptoms.

Its physiological effects are so well understood it is superfluous to recount them here, but attention will be briefly drawn to some of its chief medicinal applications; its toxic effects and surgical use being reserved for another review.

Its anæsthetic powers of course soon suggested its use in painful affections of the stomach, but its applicability to such conditions was soon found to be limited.

D'Ardenne[1] since March, 1885, has treated numerous cases of painful affections of the stomach with the extract of coca, with the object of relieving the pain. In cases associated with structural lesions of the walls of the stomach, the relief obtained was incomplete and of short duration, but in purely functional troubles the pain invariably disappeared, however severe the attack may have been, and even when the usual remedies have been employed in vain. The dose was half a drachm of the extract given every two hours.

M. Laffont believes himself justified in saying[2] that cocaine is a "sensitive curare," for, as regards the sensitive terminations of nerves, it acts, like curare does on the terminations of motor nerves, on the motor patches. He concludes that the excito-motor nervo-muscular action of cocaine on the great constrictor sympathetic nerve and on all the smooth muscles indicates its utilization in the group of atonic gastro-intestinal maladies—flatulent dyspepsia, dilatation of the stomach, sluggishness of the intestines, etc.

Mr. S. Miller[3] in obstinate vomiting due to stimulants, gives a pill, containing a quarter of a grain of cocaine, and one grain of extract of hyoscyamus, producing prompt relief.

Manasseïn affirms its usefulness in seasickness and the vomiting of phthisis, for which latter condition he employs it internally, in doses of a small fraction of a grain, or by local applications to the pharynx.

Dr. M. C. Corner recommends it[4] very highly in reflex vomiting, and narrates the following case:

"The patient, having been ill for some days, was in an exceeding prostrate condition, suffering from incessant vomiting and distressing retching, and unable to retain even ice-water. I prescribed a freshly prepared mixture of bismuth, also ordered small pills of carbolic acid (one grain each). I saw her again that day, and finding her condition worse I discontinued all nourishment and medicines by the mouth, and ordered counter-irritants over the epigastrium and nutrient enemata. The fol-

[1] *Lond. Med. Record*, Nov., 1887.
[2] *Lancet*, Jan. 21, 1888.
[3] *Lond. Med. Record*, April 15, 1886.
[4] *Lancet*, Jan. 21, 1888.

lowing day she was much weaker, the distressing retching continuing. Becoming anxious, I decided on having a second opinion; but before doing so, and having my hypodermic case with me, I gave her five minims of a 20-per-cent. solution of cocaine in a teaspoonful of cold water, taken slowly. The effect was decisive. She went off into a calm sleep for over two hours, awaking with a slight feeling of nausea. I then left, leaving three doses of the same quantities to be given according to symptoms, with intervals of two or three hours. Being busy, I did not see her until late the following day, when I found her considerably improved."

In intestinal troubles it seems to have a limited utility.

Pott[1] of Halle gave the tincture to fifty children, aged from under two years, and suffering from more or less severe forms of enteritis, colitis, gastro-enteritis, and cholera nostras. The children, without exception, bore it very well, and showed no narcotization or other ill effect from it whatever, even after large doses and long-continued use. The therapeutic results of its use in gastric and intestinal affections were very striking. In cases of cholera nostras, even where collapse threatened to set in and danger became imminent, the patient unexpectedly recovered when tincture of coca was energetically administered, usually within twelve or at most twenty-four hours. After fifty to a hundred drops had been given, the vomiting ceased, the diarrhœa yielded, the appetite returned, and complete recovery ensued. The author acknowledges that part of the benefit observed might have been due to the careful dieting and to the alcohol contained in the tincture, but he believes that a considerable share of it must be attributed to the coca itself.

Dr. Zahorowski describes[2] a case of dysentery in a boy of three, in whom violent and almost incessant tenesmus not only caused an agonizing pain to the little patient, but also threatened to give rise to prolapsus of the rectum. To obviate that complication, and to relieve the child's state, the writer resorted to hourly painting the rectal mucous membrane by means of a brush with a sixteen-per-cent. solution of hydrochlorate of cocaine. After a few paintings the tenesmus ceased, and the stools, though still frequent, became quite painless, the patient subsequently making a rapid and steady recovery under the use of calomel, with castor-oil, and myrobolan. Dr. Wiktor writes that he also tried cocaine, in the shape of suppositories, containing each $\frac{1}{15}$ gr. of the alkaloid, in a case of dysentery in a man, the tenesmus and pain rapidly disappearing. He adds that the use of cocaine in the form of a suppository is, in similar cases, more convenient and more effective than any painting.

In the *Practitioner*, Dec., 1885, Mr. C. E. Shelly draws attention to the astringent properties of cocaine. Some cases are recorded of patients who suffered from bleeding from the mucous membrane of the lower bowel, and in whom the administration of a few drachms of the fluid extract of coca produced complete relief.

According to Schech[3] it has no effect in the extremely painful phlegmonous inflammation of the soft palate or tonsils. It, however, possesses a powerful vaso-contractile action on the soft mucous tissues of the nose. A few minutes after the application of cocaine, the turgid spongy membrane will contract and tightly adapt itself to the bone, thus enlarging the nasal ducts to double of their previous width, which is of great value in the diagnosis of small polypi, of affections of the bones, and of foreign bodies.

In tuberculosis of the pharynx and larynx cocaine is of the greatest value. Not because of any curative action, but because, by the anæsthesia it produces, it enables the patient to swallow solid food without pain.

Greenwell, of Cleburne, Texas, recommends it highly in the croup of young children.

Kohts of Strasburg says its effect in such conditions causes only a very temporary diminution of pain and dysphagia.

In chronic coryza and hay-fever, according to Miller,[4] nothing affords as much relief as cocaine. A two- or three-per-cent. solution may be used in the spray for this purpose, or a snuff-powder of starch and bismuth containing one per cent. of cocaine.

Paget states[5] that he can testify from personal experience to the efficiency of

[1] *Lond. Med. Record*, Feb. 15, 1886.
[2] *Lond. Med. Record*, Jan. 20, 1888.
[3] *Lond. Med. Record*, July 15, 1886.
[4] *Lond. Med. Record*, April 15, 1886.
[5] *Lond. Med. Record*, Aug. 16, 1886.

cocaine in the relief of hay-fever. The author employs a small spray-producer and a solution of cocaine (two per cent.). A few minims sprayed upon the eyes, with the lids half closed, and afterwards each nostril, will give relief for some time. When the symptoms return, the spray must be repeated. About half a grain of cocaine is sufficient to use each time, and, if repeated several times in the day, more relief is obtained than by any other method of treatment.

Moorhead[1] testifies to the great temporary relief given to sufferers from hay-fever by cocaine, but found the benefit so transient that he tried other remedies, of which he considers the combination of morphine ($\frac{1}{30}$ gr.) and atropine ($\frac{1}{100}$ gr.), given hypodermically twice a day, the best.

In whooping-cough the general opinion is that cocaine has no curative power. In many cases it seems to shorten the duration of the disease, and improve the general condition of the patient by lessening the frequency of the paroxysms.

Garnett[2] has treated two cases of whooping-cough with ten minims of a 6 per cent. solution of cocaine hydrochlorate, inhaled from warm water. He found that this treatment cut short the attack, but did not shorten the course of the disease. Labric and Barbillon have come to the same conclusion as Garnett. Barbillon[3] used a 5 per cent. solution, and from two to four times in the twenty-four hours painted the base of the tongue, the tonsils, and the pharynx. This treatment diminished the number of attacks from fifteen and twenty to ten, six, and five daily in the course of a few days. In the seven cases treated by him in this manner, the average duration was one month to two and a half months, so that the course of the disease was not by any means shortened. Michael has published[3] 300 cases of whooping-cough. Of the 100 cases which he himself treated he gives the following account. There was a marked amelioration of the symptoms after one to three days' treatment in 74 per cent. of the cases, no great change in 12 per cent., and an aggravation of the symptoms in 14 per cent.; 7 per cent. were healed in two to three days, 23 per cent. in less than twenty days, 12 per cent. in three to five weeks, and 3 per cent. in longer than thirty-five days. The treatment seems to be most beneficial in quite early cases, those in which the spasmodic stage has existed for a few days only; and also in quite old cases, those over the fourth week of illness. In speaking of the treatment of whooping-cough, Trousseau said that a remedy is of value if it conduces to a cure of the disease in less than six weeks. The spasmodic stage of the disease lasted under fourteen days in sixty-six of Michael's cases, and under five weeks in ninety. He therefore considers the treatment eminently satisfactory.

Pott testifies[3] that the most astonishing results were observed in cases of whooping-cough, the paroxysms of which were almost immediately reduced from twenty to three or four in the twenty-four hours; to accomplish this, two or three pencillings a day were sufficient. In all, fifteen cases of pertussis were thus treated; and of these, two died of intercurrent pneumonia, but whether the drug stood in any causal relation to this could not be determined.

Schech,[4] in whooping-cough and asthma, advises inhalations of a $\frac{1}{3}$ to 1 per cent. solution.

In the *Ruskaia Meditzina*, No. 12, 1886, Lashkevitch[5] details four cases of angina pectoris, in which he obtained most satisfactory results from the internal administration of hydrochlorate of cocaine in doses from one third to half a grain, three or four times a day. The drug does not cut short the paroxysms, though it somewhat relieves their acuteness. But, after two or three days' use of cocaine, the attacks gradually decrease in their strength and duration, and then disappear altogether. As to the general useful effects, the alkaloid retards the pulse and increases its volume, as well as the quantity of urine. One of the patients, a gentleman, aged 35, suffered from insufficiency of the aortic valves, with cardiac hypertrophy and slight dilatation of the ascending part of the aorta; stenocardiac paroxysms came eight times and more daily for two years. They disappeared after the use of half-grain doses of cocaine three times daily, for three consecutive days. A second patient, a landlord, aged 63, with six months' angina pectoris, had mitral regurgitation, dilatation of the

[1] *Lond. Med. Record*, Aug. 16, 1886.
[2] *Lond. Med. Record*, March 15, 1887.
[3] *Lond. Med. Record*, Feb. 15, 1886.
[4] *Lond. Med. Record*, July 15, 1886.
[5] *Lond. Med. Record*, June 15, 1886.

aorta, and intense arterio-sclerosis. A third, a public official, aged 58, had also marked arterio-sclerosis; while the fourth, a book-keeper, aged 40, with eight months' paroxysms, suffered from aortic regurgitation, with dilatation of the ascending part of the aorta. In the last three patients, the attack ceased to come after two days' taking one third (in two) or one half of a grain (in one) of the drug three or five times daily. In conclusion, Professor Lashkevitch states that inhalation of pure oxygen considerably shortens the duration of the paroxysms, and may be most advantageously combined with the internal administration of cocaine. This method solves both of the therapeutic problems in cases of angina pectoris; it shortens the paroxysms, and prevents them.

A less encouraging result was experienced in a case of angina pectoris as regards the tincture, by Pott, but considerable benefit followed the use of pills made from the extract. Indeed, it may be affirmed that the extract is the more certain preparation; its disadvantage is, that it usually produces constipation.

In spite of the reported failures of cocaine as a cure for melancholia we still see it recommended as infallible in that ailment. So utterly irrational is such treatment[1] that we deem it advisable to quote in full the following case of Dr. I. S. Stone, of Lincoln, Va., in which it not only did no good but positive harm.[2]

The patient was a lady, aged 53, who had been the victim of melancholia at times for many years. She would have a slight illness, or some real or imaginary loss of friendship or money, and would then for months at a time remain, not always a *passive*, but frequently an *active* melancholic.

The first injection of cocaine was given at my office, the lady having been brought two miles for that purpose. I administered one-fourth grain under the skin of the left forearm. In less than two minutes the patient remarked: "I feel that medicine all over me." I saw at once that she expected some wonderful effect from the injection, and proceeded to divert her mind from her present condition to some past and more agreeable topic. I think I was quite successful, for soon she perceptibly brightened up, and her conversation grew in rapidity as it did in interest; and I was correspondingly elated that I could even for a time bring this poor patient away from her present, back to the past, and she proceeded to tell of old times, old love scenes, episodes, etc., of her youth, and of other rare secrets, which, she informed me, she had "never told before." In an hour she returned to her home, and the next morning informed me that the "medicine wore away in an hour after she left my office."

The next day promptly at the appointed time the patient returned, but with a gloomy and despairing manner. So I gave her one-half grain in the same arm as before. In less than five minutes she grew greatly excited, and even wildly so. In a few minutes I was obliged to remove her to a room in my house, adjoining the office, to avoid publicity. A gentleman, an acquaintance of hers, barely escaped her violent and tearful embrace as she was being hurried from the office. It is beyond my power of description to note the particulars of this woman's delirium, for such it was. More than an hour was occupied in quieting her, (for I was not willing to give any drug for that purpose, as I wished to see the effect of the cocaine). After the patient returned in a measure to her reason, I was obliged to accompany her to her home, and thus I lost four of my busiest hours.

The experience of that morning prevented me from trying so large an amount of the drug again; so I gave her one-fourth grain at her home, for obvious reasons. On this occasion the result was unlike either of the previous ones. An exhilaration, lasting for two hours, followed, during which she spent most of the time walking rapidly and apparently without fatigue, which she complains of almost unceasingly. Her mind was occupied busily, however, with so many other things that she forgot her tire. Thus various topics were discussed, such as bits of gossip, church matters, and other small talk were indulged in. Once, in great confidence, she told me that she meditated taking poison, but had only felt thus inclined once. She, however, bemoans her condition to such an extent as to beg for death to come to her relief.

The three following injections were given without special effect other than already mentioned. There was always an exhilarant effect at first, but it was uncertain, the first injection being followed by better re-

[1] See Cocaine in Insanity by A. B. Shaw, M.D., MEDICAL ANALECTIC, 1886, p. 198.

[2] *Virg. Med. Mo.*, Jan., 1888.

sults than those given later. Her condition, after the treatment was discontinued, was worse than before.

Jaeckel reports[1] four cases of morphine-mania, three men and one woman, which he had treated by cocaine.

In one case the morphine was entirely stopped, but, after two days, aggravated symptoms of abstinence, vomiting, pains in the joints and extremities, especially in the calves, appeared. Although these ailments persisted in varying intensity after each omission of the injections of morphine subsequent to those of cocaine, the desuetude from taking 7½ grains of hydrochlorate of morphine was accomplished after six more days of treatment by combined and gradually diminishing injections, and the patient was considered fit to return to his residence. He, however, after a fortnight, had relapsed to taking 6 grains of morphine, having been, according to his statement, necessitated to return to the accustomed stimulant, owing to his extreme prostration from anxiety and prolonged night-watches at the sick-bed of an only child, dangerously ill with diphtheria.

The treatment of the other three cases was carried out by combined injections consisting at the commencement of cocaine and morphine, in which the habitual dose of morphine—in neither case exceeding 9.25 grains—was gradually reduced to half its original strength, in such manner, that one and one half to two graduations of a Pravaz's syringe were every other day deducted at each injection from the dose of the preceding day. In case of more violent symptoms of abstinence, the dose of morphine, more frequently that in the evening, was slightly increased. The times of the day when morphine had previously been habitually taken, were likewise observed at the commencement of the treatment; but the number of the injections was gradually reduced to one in the morning and one in the evening, and finally to only one at bedtime.

The anthor recommends further trials of this method of combined injection of cocaine and morphine, having been taught by experience that by this kind of treatment the more violent symptoms of abstinence will be kept in abeyance, whilst in the one case, in which, on the request of the patient, he omitted the morphine, the very symptoms which he strove to avert were called forth in a highly aggravated degree. Such symptoms will continue in spite of the strongest injections of cocaine, if these be not combined with morphine.

Banning's experience with cocaine in morphinism is more encouraging. He prescribed cocaine for a patient who had been in the habit of taking five to ten grains of morphine daily for three years, with a view of counteracting the effects of morphinism. He commenced with a dose of one eighth of a grain, and increased it to two thirds of a grain. During the first three days the patient took eight grains and a half of the drug without any toxic effect being produced. The only physiological effect was one of exaltation of the nervous power, followed in three hours by corresponding depression. Two or three small doses of morphine were administered during this period, after which the patient progressed without a bad symptom.

Walle reports favorable results from the use of cocaine in morphia mania, the morphine being withheld. He gave as much as gr. xii. daily by subcutaneous injection.

Erlenmeyer denies its efficacy in such cases.

In parturition cocaine has been used in various ways and consequently with very diverse results.

Dr. Corner[2] has used suppositories containing three grains each of cocaine, and has found great relief experienced in those cases undergoing the agonizing pains common to the latter part of the first and beginning of the second stages of labor. He has also used them in cases of primiparæ with happy results.

Hartzhorne[3] uses cocaine as follows: By means of an ordinary glass syringe a compound, composed of six parts of cocaine, twenty-four of vaseline, and twenty of glycerine, is injected as high up the vagina as possible. By this means the cocaine is applied to all parts of the vagina, insuring a more lasting effect than when applied in solution. The pain due to pressure, the dilatation of the cervix, and the expansion of the perineum is so markedly relieved by this means that an ordinary labor is deprived of half its agony.

Harnack[4] has used cocaine in the shape

[1] *Lond. Med. Record*, Feb. 15, 1886.
[2] *Lancet*, Jan. 21, 1888.
[3] *Lond. Med. Record*, Aug. 16, 1886.
[4] *Lond. Med. Record*, July 15, 1887.

of a ten-per-cent. solution. In one case the uterine os during the period of dilatation, and in another the genital slit during the period of expulsion, was painted with the solution seven times, with an interval of five minutes. Not the slightest relief was obtained.

GENERAL MEDICINE AND PATHOLOGY.

Nivet on the Relative Frequency of the Different Varieties of Extra-Genital Chancres.—Among 581 infectious extra-genital chancres in the adult the author has found

	MALES.	FEMALES.
Chancres of the head	286	127
" " trunk	44	63
" " limbs	39	15
" " neck	5	2
	374	207

Fourteen extra-genital chancres of children under thirty months were distributed as follows :

Upper lip	4
Under lip	2
Labial commissure	2
Anal region.	2
Tongue	1
Nose	1
Ear	1
	14

In these 595 cases the chancres were located as follows : lips, 268 ; anus and perianal region, 50 ; tongue, 37 ; breast, 34 ; finger, 31 ; chin, 31 ; tonsil, 29 ; abdomen, 20 ; eye and eyelid, 15 ; thigh, 12 ; cheek, 11 ; nose, 11 ; neck, 8 ; gums, 6 ; hands, 5 ; ear, 4 ; palate, 3 ; buttock, 3 ; vault of palate, 2 ; face, 2 ; temple, 1 ; forehead, 1 ; elbow, 1 ; arm, 1 ; sterno-clavicular articulation, 1 ; forearm, 1 ; pharynx, 1 ; great trochanter, 1 ; malleolus, 1 ; clavicle, 1 ; malar region, 1 ; calf, 1 ; mouth, 1. —Thèse de Paris in *Ann. de Dermatologie et de Syph.*, Dec. 25, 1887.

Sturges (O.) on Chorea in a Child under Three.—In May last I published the particulars of a child of three years and six months affected with chorea in intimate connection with heart disease and with acute rheumatism.[1] Just a year later a still younger child was admitted into the same ward with the same disorder. She also had valve disease, and, although not herself rheumatic, was of rheumatic parentage.

The child now in question is a girl, aged on admission two years and eleven months. She was born at eight months, after a difficult labor, but is plump and well-nourished, with fair hair and ruddy complexion. She has had measles and whooping-cough, but no known rheumatism or other disease. The father, aged forty-three, is "rheumatic" ; the mother, aged thirty-seven, had an attack of acute rheumatism a year after the child's birth. There is no insanity or other neurosis in the family. Of thirteen children, however, six had died, all but one in infancy.

Three months ago the child fell on the back of the head, and was unconscious for half an hour, she then had two fits in quick succession, and was sick. After this accident the child was very "nervous," starting and screaming in sleep. The measles attack (above mentioned) followed the fall. Six days before admission she again had a fit, and was very sick. After this she "seemed very wild, tossing her arms and legs about." On the following day the mother (who was the narrator) noticed a red and tender swelling on the buttock. This proved to be an abscess, and was lanced the day preceding admission. Meanwhile the child has been getting weak and uncertain on her legs, and is now unable to walk or to feed herself. The patient is slightly rickety, and the ribs are beaded ; the anterior fontanelle is closed, and the skull well shaped.

On admission the patient was violently emotional, screaming and throwing herself about. In the intervals of such paroxysms her movements are observed to be choreiform, and pretty equally distributed over the face, hands, and feet, appearing quite characteristic when the child is stripped. Moreover, the right arm when lifted falls on being released, and the left is alone used in reaching and in raising the body, while, when in sitting position the patient leans over to the right side. There is obvious incoördination of the left arm when the child attempts to direct it. In addition to these signs, there is at the heart's apex —that is, in the fourth space half an inch within the left nipple line—a loud, and on admission, musical, apex systolic murmur, which is conducted to the axilla, and heard distinctly behind.

Of the child's progress it need only be

[1] Rheumatic Element in the Chorea of Young Children.—*Archives of Pediatrics*, May, 1887.

said that, although slow, it was always in the direction of recovery.—*Lancet*, Jan. 21, 1888.

Jamison (A.) on Intestinal Obstruction from Gall Stone—Spontaneous Fracture and Recovery.—The discussion at the meeting of the Clinical Society on January 13th, on the treatment of gall stones, and the question, are we to interfere at once in subsequent obstruction from them? induces me to place on record the following case. Probably early laparotomy in very urgent cases is the best procedure, but at times cases crop up in practice with such unanticipated endings, that they may rank as true clinical experiments. The patient, a woman 36 years of age, of very spare habit, had long suffered from gastric troubles, slight jaundice, and occasional attacks of severe pain. In the right hypochondrium she had a swelling over the region of the gall bladder, moving up and down with respiration, and general tenderness around it. I was sent to see her in great haste, being told she was dying. When I got to her bedside I found her in comparative ease. She told me she had had an attack of the most violent pain and intense retching which had suddenly ceased. The tenderness over the liver was much less and the swelling hardly to be felt. Things went on very well for two days, when another attack of acute pain came on, now referred to the region of the umbilicus, great retching and constant nausea; there had been no motion since the previous attack of pain. The pain now came on in paroxysms, the intestines could be seen moving tortuously about, and she said the pain seemed to "stick in one spot." There was no rise in temperature, and the pulse kept fairly good. It was obvious that the case was now one of obstruction from gall stone. I told her plainly that the issue might be fatal, and strongly urged her to submit to operation. This she steadily refused to do, having heard of a fatal case, so matters went on for four days longer; no motion had been passed nor any flatus. I kept repeatedly urging her to have laparotomy performed, but she still steadily refused, and I became more and more confident in telling her of the outlook in her case. Judge of my surprise when in the evening I found her much better; she said she was quite well. She told me that shortly after my last examination she felt something give way during a violent pain, and almost immediately afterwards passed a huge bile-stained motion, and within an hour another copious motion. This had not been thrown away, and on examining it I found two pieces of what had been a large gall stone of softish consistence. I fancy the stone must have been gripped and fractured spontaneously from the force of the intestinal contractions. However, the patient quickly mended and got comparatively strong.

During the treatment, she was kept constantly under opium; but she was quite sure that, in the form of morphine suppositories, she got much more ease than when given either by the mouth or hypodermically. When the symptoms of obstruction were obvious, she was kept to as little iced water to sip as possible. She said all attempts at rectal feeding brought on her paroxysms of pain, and preferred to keep to her iced water. These two therapeutic facts I have seen brought out, in cases of obstruction, over and over again; and I am perfectly sure that, till the pulse and temperature begin to rise, absolute starvation, and morphine by the rectum only, give the best chances of success. But, if the temperature or pulse rise (and I think the pulse is the safest guide), then laparotomy should be resorted to without delay. It is quite possible Mr. Tait's suggestion of trying to crush the stone might be tried first. It would do no harm. At all events, this case goes to show that the chances of spontaneous fracture should not be omitted from our calculations.—*Br. Med. Jour.*, Jan. 28, 1888.

Worral (R.) on a Remarkable Case of Fæcal Accumulation.—The patient was a delicate girl of thirteen years, who had suffered for two months from a steadily increasing enlargement of the abdomen. She had enjoyed fair health, and her mother thought her bowels had moved regularly.

A solid tumor, neither painful nor tender, was found to fill nearly the whole abdominal cavity. It was of stony hardness, nodular, and irregular. The heart was displaced upwards, and the liver dulness in front was absent. The superficial veins of the chest and abdomen were enlarged. The right lower extremity was swollen. The tumor was slightly movable in all directions. The abdomen was twenty-seven inches in circumference at the most prominent part.

The rectum was found full of impacted

fæces. Compound liquorice powder was followed each day by a free evacuation, the discharges becoming finally diarrhœal and extremely offensive. The temperature rose to 101° F. and the pulse to 130., and the patient was failing rapidly. Fearing a fatal issue, and suspecting the presence of malignant disease, the abdomen was opened, and what appeared to be a large cyst presented itself. It proved to be the ascending colon enormously hypertrophied and dilated. The cæcum was entirely blocked by hardened fæces. No malignant growth was found, and the abdominal wound was closed by fifteen wire sutures. The bowels continued to act almost continuously after the operation, and much relief was experienced therefrom. The patient was discharged in sound health on the fourteenth day.—*Australasian Med. Gaz.*, Dec., 1887.

Shaw (E. B.) on the Treatment of Infantile Constipation.—In cases where the passages are dry and hard, cascara has failed most signally, and that, too, after a most patient and thorough trial of the drug. In these cases, where there is a deficiency in the intestinal juices, I can most heartily commend to the consideration of the profession the use of small doses of podophyllin. For a babe from nine months to a year old, I would prescribe the following, to be used for at least two weeks, and longer if found necessary:

℞ Resinæ podophyl. . . . . gr. ij.
Sacch. lact. . . . . ʒ ss.
M. et. ft. chart. No. xxxij.
Sig.—One at night in a little milk.

Of course the proper dose can only be determined by trial. My aim is to produce a soft and easy discharge every day. And right here let me insist on the importance of *appointing a regular time to have the bowels moved.* Nothing should turn the nurse aside from attention to this most important duty. It is truly remarkable at what an early age an infant can be taught what it means to be placed on his little chair. I have often known mothers to commence to educate their babes in this direction as early as the fourth month.—*Kansas City Med. Index*, Jan., 1888.

Horwitz (O.) on a Case of Hysterical Trismus.—The patient was a thin, nervous woman, aged twenty-three years, a seamstress. Five months before admission to the hospital she had an acute tonsillitis, which was followed by rigidity of the temporo-maxillary articulation, the jaws permitting of about one quarter of an inch separation. This condition remained. She was put under an anæsthetic, and the jaws separated of themselves as soon as consciousness was lost. A mouth gag was inserted to keep the jaws asunder until the effect of the ether wore off, at which time the patient could open and shut the jaws herself. A permanent cure resulted.—*Med. News*, Jan. 21, 1888.

Chicken Cholera and Rabbits.—The offer of M. Pasteur to exterminate rabbits in some of the English colonies, and the sentimental objection to his method, is fresh in the minds of all. His plan was to utilize the infectious and deadly action of chicken cholera poison upon rabbits to rid certain localities of the pests.

Mme. Pommery put at M. Pasteur's disposal an enclosure of eighteen acres, the ground of which was completely riddled by the burrows of rabbits. The workmen estimated that more than 1,000 rabbits came out each day to eat from the boxes of provender furnished them. December 23d, M. Loir sprinkled their food with a fresh culture of the microbe of chicken cholera. In a very few minutes the repast was devoured. The results were as follows: Mme. Pommery writes that on the next morning nine dead rabbits were counted outside the burrows. The second day the enclosure was not visited. The third day thirteen more dead ones were counted, and not a single living rabbit was to be seen. Careful watching on subsequent days proved the annihilation of the entire lot. Some burrows were opened, and anywhere from two to five dead animals found in each.—*L'Union Méd.*, Jan. 28, 1888.

Eve (F. S.) on the Communication of Tuberculosis by Ritual Circumcision.—A Jewish child, aged five months, was admitted into the London Hospital on August 23, 1887, with a large globular fluctuating swelling in each groin. The skin over each was red and thinned. On the under surface of the penis, at the site of the frænum, was a small superficial sore. The abcesses were opened, and a quantity of pus containing some masses of caseous material was evacuated. Their walls were then scraped. The child's condition improved, and in fourteen days he left the hospital with a sinus in each groin, discharging only a small amount of pus.

The mother stated that the child had

been circumcised when eight days old, and the wound appeared to heal properly. Six weeks afterwards, however, she noticed a small swelling in each groin, and, on applying to the doctor, it was observed that the circumcision wound had either "broken out again" or had not healed. The swellings grew gradually larger until his admission. Noticing the suspicious nature of the contents of the abscess, I took some of the caseous material and inserted it beneath the skin of the groin of a guinea-pig. The neighboring glands soon became enlarged; and, on killing the animal in the course of some ten weeks, I found intense general tuberculosis of the lungs, liver, and spleen, the disease having extended from the inguinal glands along the iliac to the lumbar.

On November 22d I called to see the child. He still looked thin and delicate, but showed no evidence of tuberculosis; and the parents stated that he had much improved in general health. There was a pin-hole sinus in the left groin, but the wound in the right had suddenly healed. I learned that the person who performed the operation had died the previous week from consumption. He had not applied his lips to the wound, but after removing the prepuce, he ejected some wine from his mouth over it. The child's parents were both healthy. When last seen in the present month the child appeared perfectly well.

Living in the same house was another woman whose infant had been circumcised by the same person in 1886. Abscesses formed in the groins in this case six or seven weeks after the operation. For these the child was admitted into the London Hospital. In the clinical notes of this case it is stated that the cause of the abscesses was not ascertained. The child is now well and strong.

Before the occurrence of the above-related case, I had not noted that similar cases of inoculation of tubercle in the ritual performance of circumcision had been recorded. In the *British Medical Journal* (vol. i., 1887, page 535) a paper on the subject by Dr. Eisenberg[1] is noticed. He reports a case in which he demonstrated tubercle bacilli in the inflamed inguinal glands, and refers to twelve other cases recorded before the discovery of the tubercle bacillus by Lindman and Lehman. In these cases also the operation was performed by phthisical men, and in all suction of the wound was employed. Still more recently, W. Meyer[2] details another case, in which he found miliary tubercles and bacilli in great numbers in the diseased tissues of the groins. A subcutaneous cold abscess formed in the inguinal region. In all the cases mentioned by Eisenberg, the inguinal glands became inflamed three weeks after circumcision; in Meyer's case in four weeks; but in the two cases observed by myself this symptom was not noticed until six or seven weeks had elapsed. Not long since a group of cases occurred at the London Hospital, in which primary syphilis had been communicated to infants by ritual circumcision; and this is probably a more common event than the transmission of tuberculosis. Attention having only comparatively recently been directed to this subject, doubtless many other instances of the transmission of both diseases have been overlooked. But in view of the facts which are now to hand, it is surely time that steps should be taken among Jewish communities to obviate the recurrence of similar catastrophes. It may be advisable to point out that I verified the tubercular nature of the disease in the case related by inoculating a guinea-pig, instead of searching for the tubercle bacillus, for the reason that the former method appeared surer; especially owing to the circumstance that the smegma bacillus found beneath the prepuce and abundantly about the skin of the anal and surrounding parts, gives precisely the same staining reaction as the tubercle bacillus itself, and might therefore be mistaken for it.—*Lancet*, Jan., 1888.

Hallopeau (H.) on Angina Pectoris of Syphilitic Origin.—The author narrates three cases of the above disease, and at the end of his article draws the following conclusions:

1. That syphilis can give rise, in its secondary and tertiary stages, to attacks of angina pectoris.

2. That they present the classical type of that affection.

3. That at other times they are complicated by other disturbances of innervation due to a reflex excitation of the vaso-constrictors or vaso-dilators, causing thus ab-

[1] *Berlin. Med. Woch.*, No. 35, 1886, S. 582.

[2] *Centralblatt f. Chirurgie*, No. 46, 1887, S. 860.

normal sensations of cold or heat with chills or sweating, and perhaps producing paresis from ischæmia of the motor centres.

4. That these attacks are due to the development of specific neoplasms upon the course of the cardiac plexus or in its immediate neighborhood.

5. That the character is changed by the evolution of the lesions, by their shifting from the point first affected, and their extension to other branches of the sympathetic.

6. That they are cured in a few days by the iodide of potassium or mercury and never recur.—*Ann. de Dermat. et de Syph.*, Dec. 25, 1887.

MISCELLANEOUS.

Bruhl (J.) on Cardiocentesis.—The author has, by this heroic measure, removed from the pulmonary circulation at different times, from an ounce to two pounds (?) of blood. He considers this method of bloodletting indicated in cases of fulminant congestion of the lungs, in alcohol poisoning, in overworked and degenerate hearts. A distended right heart without valvular or orificial disease, distension of venous trunks, a feeble systole, such are conditions which at least temporarily will be relieved by cardiocentesis.

As contra-indications may be named, organic disease of the valves or myocardium, and organic diseases of the lungs and emphysema.

To puncture the right auricle the aspirator needle should be introduced near the right border of the sternum in the third intercostal space. The right ventricle should be punctured in its least mobile portion, that is, near its base, and the needle should be introduced near the left border of the sternum in the fourth intercostal space.—*Gaz. Hebd. des Sci. Méd. de Bord.*, Jan. 15, 1888.

Gowers (W. R.) and Horsley (V.) on Excision of a Tumor of the Spinal Cord.—A gentleman of middle age had for more than three years suffered with acute pain in about the middle of the back, just below and inside the lower angle of the left scapula. The spot was very tender as well as painful, but below the region of the fifth spinal nerve there was almost complete anæsthesia as well as complete paraplegia; the accuracy of the delimitation was more distinct on the left side than the right. After some discussion, the diagnosis of tumor of the spinal cord was agreed upon, and Horsley undertook the operation necessary for its removal. On June 9, 1887, the spines and laminæ of the fifth and fourth dorsal vertebræ were removed without laying bare the cause of mischief; but when the greater part of the posterior part of the third vertebra had been removed, a myxoma about the size of a filbert became visible in the spinal canal, lying on the right side, and compressing the spinal cord. This was shelled out without difficulty, and no further new growth was found. The pain was for a time slightly relieved, but again and again recurred with great severity, and the power of motion was only slowly and intermittently regained during the first three or four weeks. The pressure over the wound was accomplished by a pad and strong jacket; the local pain gradually diminished; the motor power gradually returned to the lower parts; and, after seven months, the lower limbs, though a little stiff, had become almost natural, and the remains of the laminæ had come so near together in the well-healed cicatrix that any further external support seemed unnecessary.—*Brit. Med. Jour.*, Jan. 28, 1888.

A Novel Suicide.—The deceased had dined alone with his wife on the evening in question, and subsequently was seated with her in the drawing-room, where, as the lady was playing to him on the piano, he destroyed himself in a manner at once unusual and terrible. Heating a thin brass poker to redness in the fire, he forced it several times into the abdomen, no less than four wounds so inflicted being found on the body. The unfortunate wife's attention was speedily called to her husband's condition by the cries involuntarily excited by his intense sufferings, and on witnessing the distressing nature of the cause which gave rise to them, the poor lady immediately fainted, and was found in this condition by the servants attracted to the room by the admiral's groans. After some hours of intense suffering the unhappy suicide succumbed to the injuries he had inflicted on himself about four o'clock on Friday morning. Such a mode of suicide is almost unique in the history of medical jurisprudence, and it suggests the possession of a high degree of determinate will on the part of the victim to enable him, in spite of the

terrible pain which even the first thrust must have occasioned, to persist in the attempt at self-destruction.—*Med. Press*, Jan. 25, 1888.

Ziegler (G. J.) on Nitro-Hydrochloric Acid as an Antiseptic, etc.—According to the author, this remedy is particularly efficacious in all superalkaline, scorbutic, zymotic, septic, contagious, malarial, toxæmic, cholæmic, and uræmic diseases, adynamic fevers, and infectious affections, with those maladies dependent upon a necræmic, mephitic, and putrescent condition, even with local lesions both internally and externally, though rather too active and laxative in general for those in the gastro-intestinal canal connected with typhoid or enteric fever, cholera, and like abnormalites, for which the milder and more astringent hydrochloric, sulphuric, phosphoric, hydrobromic, and other less exciting acids are usually preferable, separately or with their compounds of iron and lime more especially, which increase their constringing, styptic, tonic, and healing properties.

He uses it externally in the form of baths, and internally using the strong acid, in doses of from gtt. ii. to iv. every one to three hours properly diluted with water, lemonade, infusion of barley, or any mildly acidulous and bland liquid. He lays great stress on its being given freshly prepared, and advises the physician to mix the strong acids (nitric 3 parts, hydrochloric 5 parts) himself.—*Jour. Am. Med. Ass'n*, Jan. 21, 1888.

Malcolm (J. D.) on a Case Illustrating the Advantages and Risks of Purgation during Convalescence from Abdominal Section.—Last September Sir Spencer Wells removed a large ovarian tumor from a patient fifty-seven years of age.

The pedicle of the tumor was very broad, and had to be secured in several pieces by stout silk ligatures; but otherwise the operation was a simple one. After operation the patient complained of much abdominal pain, and a drachm and a half of tincture of opium was administered by the bowel in the first twelve hours. The pain continued, and a drachm and a half of laudanum, gradually reduced to a drachm, in the twenty-four hours, was given for the next four days, after which the administration of laudanum was discontinued. After the operation the temperature of the patient gradually rose, and at 9:30 P.M. on the following day it was 101.4° F. in the axilla; it then gradually, but not very steadily, fell till the fifth day, when it was as low as 98.6°.

On the evening of the third day, and all through the fourth day, there was a tendency to sickness and abdominal distension, but flatus passed freely from the rectum. On the fifth day that portion of the bowel was found to contain fæces, and a small enema produced a copious evacuation, after which the feeling of sickness and distension passed off. The action of the bowels was followed by considerable pain in the right groin about the position of the pedicle, and the temperature rose in a few hours to 100° in the axilla, but again gradually fell to 98° on the seventh day after the operation. The bowels moved seven times between the fifth and tenth days, and much flatus escaped. During this time, however, the pain in the right groin increased until the patient could not bear the slightest pressure over this part. The rest of the abdomen became slightly distended, but was free from tenderness. The administration of one-sixtieth of a grain of atropia and one-twelfth of a grain of muriate of morphia, repeated every four hours, eased the pain; but the appetite became very bad, and the patient felt constantly sick after the eighth day. She also lost strength, and her pulse, which had been down to 84 and of good character, gradually rose to 100, and became very feeble. On the tenth day her temperature, which had not been above 98.6° for two days, also began to rise a little, and reached 99.6° in the axilla at 9:30 A.M.; she had been very restless all night, could not take any food, and felt very sick, while the abdomen had become more distended. This grouping of symptoms after abdominal section I have learned to associate with obstruction in the bowels, which may lead to a rapidly fatal termination of the case. In the belief, therefore, that my patient was in extreme danger from this cause, and that the best method of treatment of this condition at this stage is by the administration of a purgative, I gave her a pill containing one third of a grain of calomel and as much jalap, one grain of compound extract of colocynth, one grain of extract of aloes, one twentieth of a grain of jalapine, and a little ginger. The patient had frequently used similar pills, prescribed by her own medical attendant, and

they had moved the bowels gently during health. On this occasion the pill produced two small loose motions, and a dose of Hunyadi water, given next morning, was followed by other loose motions. The last of these was at 5 P.M. on the eleventh day after operation. Twelve hours after the pill was given the temperature had risen to 100.6° in the axilla, perspiration was extremely profuse, and the patient had become alarmingly weak, but she was then able to take food without feeling sick. After the bowels were quiet twenty minims of tincture of opium were given by the rectum, and the patient had a good night's rest. She was much stronger next morning, and this improvement continued. The pain in the right groin, however, became more severe, and the tenderness radiated over the abdomen to some distance from this part. The temperature continued feverish but irregular till the thirteenth day, when it fell to normal and remained so. On this day also the pain shifted upwards and towards the right loin, and next morning there was only slight tenderness on pressure in the groin and none in the loin. Now, however, the patient at once complained of pain when I applied pressure over the colon in the region of the gall bladder. The seat of tenderness afterwards shifted from time to time along the course of the colon, and finally was found low down in the left groin on the fifteenth day after the operation. The bowels had then been quiet for four days, and I warned the patient that she would probably soon have an action of the bowels with considerable pain. That afternoon several large, very hard fæcal masses passed into the rectum, whence they were removed with some difficulty by the nurse, after which recovery was uninterrupted.—*Lancet*, Dec. 24, 1887.

Chunn (W. P.) on Laparotomy with Incision into the Bladder.—The patient was a female, aged thirty-eight years. She had suffered for some time from retention of urine which was the chief symptom. A large fibroid tumor was present in the pelvic cavity, and it projected upwards above the symphysis. This tumor pressed upon the rectum in such a way that the stools passed by the patient had ribbon-like appearance. Pulse 130. Vomiting was incessant. She wanted relief, and he decided on making an exploratory incision into the abdomen, as the fibroid could not be moved out of the pelvis. The incision was made in the usual way and carried to such a depth that the bladder was cut into through mistake. The urine had been drawn off previous to the operation, but some of it bubbled out when the incision was made. He put his whole hand into the bladder and then introduced a sound in the urethra and felt the end projecting into the bladder. The tumor was intra-ligamentous and could not be pushed out of position, and as its removal was deemed inadvisable he closed up the bladder and abdomen. The bladder was stitched to the abdominal walls to allow the urine to escape. A long catheter was introduced into the wound. Adhesion of the bladder to the parietal peritoneum and abdominal walls is very rare. The bladder was lifted up nearly as high as the umbilicus. On the sixth or seventh day some water came through the urethra, but she still passed it through the wound.—*Maryland Med. Jour.*, Jan. 28, 1888.

A Remedy for Vesical Irritability.—To allay incessant desire to urinate and irritable bladder, when due to phosphatic deposits in the urine, Dr. W. P. Chunn, of Baltimore, uses the following prescription :

℞	Benzoic acid	ʒ ii.
	Borax	ʒ iii.
	Water	℥ xii.

Sig.: ℥ ss. t. d.

This mixture has upon two occasions acted so efficiently in what was thought to be cystitis that cystotomy was dispensed with. — *Maryland Med. Jour.*, Jan. 28, 1888.

BOOK NOTICE.

Contributions to the Study of the Heart and Lungs.—By James R. Leaming, M. D. 8vo., pp. 300. Price, $2.75. E. B. Treat, New York.

This is a collection of monographs by Dr. Leaming, most of which were read before medical societies during the last twenty-two years. The book is divided into three parts as follows ; first, papers on diseases of the lungs and pleuræ ; second, papers on diseases of the heart ; and third, a few miscellaneous articles on therapeutics.

In the articles on pneumonia and that on pleuritis the bulk of the articles is taken up with the anatomy of the lung, the changes in residual air in respiration, and the situation of râles.

The second part is mainly devoted to the cause and significance of heart sounds and heart murmurs, and well repays careful reading.

The pathology is old but evidently abreast of the times when the monographs were written. Though many readers will differ from some of the views expressed by Dr. L., the collection is interesting as showing the opinion of one of our best authorities on several diagnostic points. E. T. D.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital.

VOL. V., No. 8. February 23, 1888. WHOLE No. 56.

CONTENTS.

	PAGE
Occasional Report on Ophthalmology	89
Therapeutics	94
Miscellaneous	97

OCCASIONAL REPORT ON OPTHALMOLOGY.

BY A. T. MUZZY, M.D.

Bettman (B.) on the Artificial Ripening of Cataracts.—While cataracts are maturing, the patients are frequently prevented for months from doing work, which in the case of bread-winners is a great loss of time. Little is suggested for the relief of this condition. Until the cataract is mature, operations for their removal are contra-indicated, as the portions which adhere to the capsule at the time of operation swell under the influence of the aqueous humor, causing iritis and other unhappy results. Foerster, of Breslau, in vol. XL. of *Knapp's Archives*, proposes trituration of the cortex. The proceeding consists of quietly rubbing the cornea with the blunt end of an instrument, usually a strabismus hook or iridectomy forceps. The pressure exerted upon the cornea is transmitted to the lens, loosening and splitting the adherent and semi-opaque cortical lens fibres. These, in the course of days and weeks, become perfectly opaque, and the object of the operation has been accomplished. I have used this expedient quite often, but have modified it to suit my individual tastes. Instead of rubbing the cornea I bring the pressure to bear directly upon the lens by pressing against the capsule with a spatula usually employed to replace prolapsed iris. I prefer this method to the one recommended by Foerster, for the following reason: Trituration of the lens always follows an iridectomy. After the escape of aqueous humor iris and lens move up against the cornea; the iris contracts and the pupillary field becomes narrowed. When the blunt instrument now is rubbed against the cornea, the pressure, unless limited to the small pupillary area, will not only break down the lens fibres, but will subject cornea and the delicate iris tissue to an unnecessary irritation. I therefore, as before mentioned, carefully pass the spatula into the anterior chamber, and, if necessary, behind the iris, and gently stroke and press the lens in any direction. Great care must be observed not to exert too much pressure, otherwise a dislocation of the lens might ensue. The flat side of the instrument should always be held against the lens surface. If tilted so as to bring the edge to bear upon the capsule, it no doubt would rupture the latter. Of course strict antiseptic precautions are taken. The results of the operation are very marked; sometimes in twelve hours $\frac{5}{100}$ V has been reduced to perception of light. And in every case where it has been made use of extraction can be performed in from three to six weeks. During the removal of the opaque lens, the cortical matter escapes as a semi-fluid flocculent mass. The pupillary field is easily cleared of cortical remnants, and the danger of transparent cortical material lodging in the wound or upon the iris is overcome. The operation is feasible, easily executed, and its results rapid.—*Jour. Am. Med. Ass'n*, Dec. 3, 1887.

McKeown (W. A.) on One Hundred Consecutive Cases of Cataract, Mature and Immature, Treated by Intra-Ocular Injection.—The author says: "I have proceeded cautiously step by step, operating on cataracts less and less mature, until I have reached the practical point of

extracting lenses which are sufficiently clear to admit of patients going safely about, but presenting too much opacity to enable them to follow their occupations. I consider it a blemish on ophthalmic surgery that patients with opacities of the lens requiring very many years to develop to any thing like maturity, as hitherto understood, should be obliged to go about doing nothing, losing health, strength, spirit, and, if without means or helping friends, to become inmates of workhouses or private charitable institutions.

"I purpose now presenting to you the statistics of the last one hundred operations for cataract, of all degrees of maturity and immaturity, in which I used intra-ocular injection, and I would remind you that you have no analogous statistics. There is a large number of cases of striated cortex with clear triangles interspersed, and of cases in which the surgeon could see more or less the details of the fundus. All these would be rejected by the surgeon practising ordinary methods as unsuitable for operation.

"Of the one hundred cases there were eighty-one cases of idiopathic cataract uncomplicated, five complicated by affections of the eye or its appendages, and fourteen traumatic. Of the eighty-one, thirteen patients before operation could see to go about, and could count fingers from two to fifteen feet, but had not been able to work for a considerable period, and the fundus could be seen with more or less distinctness; nine had striated cortex with triangular areas transparent; making in all twenty-two of various degrees of immaturity. In the eighty-one cases there were eight escapes of vitreous, all slight but one, and of these only two occurred during injection. The proportion of escapes of vitreous, though a little more than usual, has, therefore, no bearing on intra-ocular injection. As to the sequence of the eighty-one operations, there were:

"1. One case of panophthalmitis occurring three weeks after operation. On the sixth day I opened the eye, expecting every thing right, there having been no complaint. I found vitreous projecting in wound enclosed in unruptured hyaloid membrane. Bandage for two weeks having been continued without material improvement, I cut off projecting vitreous; panophthalmitis supervened. The operation had been perfect in every respect, and I think the prolapse occurred from some injury to the eye.

"2. Three cases of pretty severe iritis; fair vision still remaining, and capable of improvement. One counts fingers at four feet, another at one foot, and another at six inches. The first was owing probably to syphilis and rheumatism, and the other two to impaction of iris in angle of wound.

"3. Three cases of irido-cyclitis choroiditis. *a*. One in case of patient (in whom double extraction was performed) who would not allow bandage to remain on for six days after operation. Fortunately only one eye suffered, and when he left hospital the eye was quiet and field good. *b*. Another in case of old congenital cataract and thickened capsule in man, aged thirty. Removed thickened capsule with forceps; vitreous began to come; used scoop syringe, as I have sometimes done successfully in escape of vitreous, but in this instance was obliged to leave considerable part of lens behind. An iritis with a nodule of pus and inflammation of ciliary region developed after some weeks. Made a section; removed remains of lens with syringe with complete relief. Saw him lately, when I found eye perfectly quiet, perception of light good, and tension normal; but as other eye, also operated on, had good vision, I did not propose further operation. *c*. The third in case of man, aged seventy, very nervous, and accustomed to stimulants in the morning, as I learned afterwards. Operation normal. On sixth day wound unhealthy, showing a slight focus of infiltration at one part of cornea, and a little pus in anterior chamber. Iris became involved; no pain. Treated by stimulants and hot steeping. Field of vision good, and could see bulk when I saw him a month ago. I have not seen him since, and cannot give further particulars."

In all his cases except thirty, the author used distilled water, boiled, as the injecting fluid, and in no case has he seen any evidence of intra-ocular inoculation. In the unripe cataracts considerable force has been given to the injected fluid to wash out sticky cortex, but no harm seems to have been done. He used Panas' solution thirty times, but has abandoned it, as he fears it may excite an iritis. He has injected eserine according to De Wecker's method nine times, and a number of times he has simply poured it into the conjunctival sac, and by raising the pressure of the eyelid on the ball

has facilitated the entrance of the fluid into the anterior chamber. This latter method he considers even more effectual than the former in controlling the pupil.

For irrigation the author uses a syringe with nozzles of various widths and lengths, constructed so as to yield a free and broad flow, regulated in its force by the finger on the piston.

At first he performed iridectomy, but of late he operates on cataracts, mature or nearly so, in patients obedient to instructions, without iridectomy, but on very immature cataracts with iridectomy.

He considers intra-ocular injection suited to all cases except where the lens is extracted in its capsule. By this means the gentle, moderate, and diffuse power of a fluid is substituted for leverage instruments and pressure outside the eye.—*Brit. Med. Jour.*, Jan. 28, 1888. R. W. A.

Panas on Intraocular Irrigation in Cataract Extraction.—In 1887 Panas did 223 cataract operations, in 115 of which he washed out the anterior chamber with a solution of the biniodide of mercury, and in 98 cases an aqueous solution of boric acid was used. He had no suppuration after the use of either antiseptic.

The absence of active irritation of the eye, the trifling amount of iritic exudation, the preservation of the transparency of the cornea, and the rarity of secondary cataracts, are very noticeable when this treatment is carried out.

Of the biniodide solution, only just enough should be injected to sterilize the anterior chamber, from 15 to 30 minims being generally sufficient. The solution of boric acid should be reserved for those cases where it is necessary to wash out soft particles of the lens remaining in the anterior chamber. In all the author's operations for cataract without iridectomy since March, 1884, he has obtained good optical results in 94 per cent.—*La Thérapeutique Contemp.*, Feb. 3, 1888. R. W. A.

Grandclément on Intra-Ocular Irrigation after Cataract Extraction.—The writer in the *Ann. d' Oculist.*, Jan. and Feb., 1887, reports the use of irrigation in four cases, employing the solution recommended by Panas (0.5 grain of biniodide of mercury dissolved in 1,000 grains of water, with 20 grains of alcohol), but diluted to one half. In the first case the immediate result was good, but the next day there was a dull and striated appearance of the cornea, which the day after had become still more marked ; the iris and the capsule were inflamed, and the final result was that there was scarcely any vision. In the three other cases there was some cloudiness of the cornea, but this cleared up, and the final result was satisfactory. Two of M. Panas' pupils, Messrs. Bettremiew and Vassaux, experimenting on rabbits, obtained similar effects on the cornea, and in some the opacities persisted. The writer concludes that the injection of the salts of mercury should be abandoned in consequence of their irritating effect. He believes that irrigation is a most valuable adjunct to the operation of cataract extraction, but intends in future to follow the plan of Wicherkiewicz and KcKeown of injecting boiled and sterilized water. In conclusion it is pointed out that the experiments of Sattler have shown that, for a solution of bichloride of mercury to have any effect in destroying microbes, it must not be weaker than 0.20 grain to 1,000 grains, and the biniodide is very little more active. In cases where cataract extraction is called for, and there is catarrh of the conjunctiva or lachrymal sac, the writer recommends that the microbes should first be destroyed by active treatment with a solution of the sublimate (20 to 1,000), or, better still, with five per cent. solution of carbolic acid. A smart conjunctivitis may thus be excited, and this must be allowed to subside before the cataract extraction is proceded with. Boric acid he has not found to be efficacious.—*Lond. Med. Record*, April 15, 1887.

Little on the Operative Treatment of Zonular Cataract.—The author has been most satisfied with the suction operation. Having dilated the pupil, he makes a free rupture of the capsule across the pupil, extending from margin to margin ; a similar rent is made from above downwards, keeping the needle well in the anterior part of the lens. The capsule is extensively ruptured in this way to cause its retraction well behind the iris, and so avoid secondary operations ; the needle should not penetrate too deeply, for fear of rupturing the hyaloid or dislocating the lens. A light bandage is placed over the eye, the patient is kept quiet, and atropine freely used to dilate the pupil. After two or three days, or more, according to the condition of the eye, extraction is performed by a Teale's suction curette. This is accomplished by making an incision in the

outer part of the cornea, half way between the limbus and centre, with a double cutting-edged needle, from three to four millimetres broad. Through this wound the curette is introduced into the area of the pupil, taking care not to push the open end behind the iris or too deeply into the pupil. Suction is then applied by the mouth, and by this means the whole of the pupil can be easily and rapidly cleared. The patient is then placed in bed, with a light bandage over both eyes; atropine is again used to keep the pupil dilated, and in the course of a week or ten days recovery may fairly be expected.

In eight years the author has thus operated upon 42 cases. In no instance has there been a failure. In three cases there was synechia anterior; in five cases secondary operations had to be performed on account of capsule. In all the others there was a perfectly clear and round pupil, and he attributes this freedom of the pupil from capsule to its extensive rupture in the preliminary operation. The ages of the patients ranged from 5 to 27 years, and he followed the usual practice of operating upon one eye only at a time.

If dilatation of the pupil improves vision to twenty-fiftieths with or without glasses, iridectomy, generally speaking, should be adopted.

He prefers iridectomy, also, even when only a moderate improvement of sight can be obtained, in all cases accompanied by some mental defect in the patient, arrest in the development of the eye, shrinking of the lens, or when there is evidence or suspicion of posterior disease. When a small iridectomy is desirable, the best method is that recommended by Critchett. He uses a broad needle, and a Tyrrell's hook, both instruments bent almost at a right angle, and excises a small portion of the pupillary margin of the iris downwards and inwards, leaving the periphery untouched.—*Brit. Med. Jour.*, Jan. 28, 1888. R. W. A.

Valk (Francis) on a New Method of Cataract Extraction without an Iridectomy.—The newness of the method consists in a specially devised instrument to hold the iris, so that an opening is secured as large as if an iridectomy had been performed. A Graefe's modified linear operation is performed; and, as no iridectomy is made, the lower corneal border is preferred to the upper. No atropine is used; a four-per-cent. solution of cocaine induces anæsthesia; a speculum holds the eyelids. After washing with boric-acid solution the section is made, the knife keeping within the cornea. Care is taken at the end of the section not to form a conjunctival flap. With a cystotome the capsule is lacerated. The iris retractor is now introduced closed, and when within the pupil, is steadily opened to about the position of full dilatation. Then while counter-pressure is exerted with the spoon, the retractor is slightly depressed. As the lens passes outwards, raise the points of the blades, pushing the retractor inwards under the lens to bring the iris to its normal position; then removing the retractor closed. A drop of the sulphate of eserine is instilled, followed by the usual boric-acid washing and bandaging. The instrument is in size and shape similar to the ordinary iris forceps, only the action of the blades is crossed, and the points are blunt, not hooked.—*Am. Lancet*, Dec., 1887.

Wadsworth (O. F.) on Detachment of the Retina in Both Eyes, with Albuminuria of Pregnancy; Replacement of Retina.—A married lady, 27 years of age, of good general health, though delicate constitution, complained, during the seventh month of pregnancy, of œdema of limbs and eyelids, with poor vision. Urine found to be loaded with albumen and casts. The vitreous was clear; retinal vessels larger and darker than normal. Right eye presented a general detachment of retina, with a slight layer of fluid between it and the choroid, except near equator outward, where the accumulation was much deeper. Left eye presented the same, though not so marked, condition. Nitrate of pilocarpine was used subcutaneously, with a resulting improvement in vision for three or four days. Vision improved from reading Sn. 2.25 to 1.5. Because of the appearance of ascites and a relapse in vision, premature labor was induced, resulting successfully. Sixty hours after labor could only distinguish movements of the hand in a shaded room. From this time improvement in vision went on. In seven or eight weeks no detachment could be detected in either eye; reads R. E. Jäg. 13, at 6″—8″; L. E. Jäg. 5, at 6″—8″.—*Bost. Med. and Surg. Jour.*, Jan. 5, 1888.

Miley (M.) on the Prognosis of Neuro-Retinitis in Bright's Disease.—The author has studied the histories of 375 cases of chronic renal disease, with

reference to the value of neuro-retinitis in the prognosis in that disease. His conclusions are as follows:

1. That the retinal changes occur late in renal disease. 2. That their presence appears to affect the prognosis very materially for the worse, the mortality in hospital among the affected cases being at least doubled. 3. That the prognosis is so bad that not one has lived eighteen months after the changes have been noted. 4. That, therefore, the ophthalmoscope affords a most valuable index as to the course any given case of Bright's disease is taking, except, perhaps, in pregnancy cases.

In the discussion which followed the reading of this paper, Snell referred to eight cases of Bright's disease in which, after the retinal mischief was diagnosed, death occurred in 6 weeks, 8 weeks, 2½ months, 4½ months, 5½ months, 5½ months, 10 months, and 14 months respectively. Critchett mentioned three cases where death occurred in 5, 10, and 13 months respectively.—*Lancet*, Feb. 4, 1888.

R. W. A.

Delacroix on Glioma of the Retina.—The patient was a child of two and a half years, and the affection dated from the eighteenth month. There was no alteration of the sclerotic or cornea, and the crystalline lens and media were clear. The new growth was spread out in a thin layer on the retina and formed a sort of collar upon that organ. The eye presented that peculiar shining appearance seen in the eyes of amaurotic cats. This brilliant reflex had, from the start, attracted the notice of the parents. On enucleation, it was discovered that the optic nerve had become invaded by the degeneration.—*Union Médicale et Sci. du Nord-est*, Jan. 15, 1888.

Williams (A. D.) on Diagnostic Significance of Persistent and Intermittent Chromopsy.—Attention is called to chromopsy or chromatopsy as being an almost infallible sign of brain lesion; lesions where one often finds it otherwise very difficult to diagnose. The word has so far been used to denote two different conditions: (1) a persistent state of vision in which rainbow colors appear constantly before the eye, and (2) intermittent instantaneous flashes of light and color. The former is the one valuable for brain diagnosis. This symptom consists in seeing every thing coated uniformly green and pink, commingled yet distinct from each other. It is never absent day or night, and appears to cover every object looked at. No explanation is attempted. Intermittent chromopsia indicates disease of the optic nerve, retina, or choroid, or of all combined. Here the symptoms consist in flashes of light, lightning-like in rapidity; sometimes as sparks of fire, at other times like luminous balls of various colors, sometimes floating more slowly across the field of vision.—*St. Louis Med. and Surg. Jour.*, Dec., 1887.

Phillips (T.) on Multiple Minute Ulcers of the Corneæ Following Exposure to Electric Light.—An electrician, with no previous history of eye disease, aged 24 years, while making observations of a very powerful electric arc, removed the usual protection in order to make a better examination. The eyes were thus exposed about four minutes. No immediate trouble was experienced, working with shade for some little time after. But on waking of sleep four hours after the exposure, he experienced acute pain, unable to sleep further, and was stone blind. When seen five days subsequently, patient was suffering acute pain and intense photophobia. Under action of ten-per-cent. solution cocaine it was seen that both corneæ were dotted over with fine ulcers, such as occur in states of perverted innervation. The patient, under boric-acid lotion, cocaine and atropine instillations, recovered in two weeks.—*London Lancet*, Dec. 3, 1887.

Mules on the Treatment of Ophthalmia Neonatorum by Alcohol and Corrosive Sublimate.—Evert the lids to the back fold; dry them with a soft piece of clean rag; wash them freely with ethylic alcohol—a soft, camel-hair brush; and flood with 1 to 2,000 of corrosive-sublimate watery solution.

Roux demonstrates that pure alcohol removes all loose gonococci. Pure alcohol has an extraordinary affinity for water, so that it displaces the watery fluid of the lid by alcohol making it intensely hygroscopic. The alcohol is in turn displaced by solution of corrosive sublimate, so that every possible nook and cranny is searched by the germicide. We find the discharge arrested, but the granular condition of the lid is not so rapidly reduced as by silver. I take it that that is a small matter, compared to the prompt removal of the infecting organisms. The alcohol has no appar-

ent effect upon the cornea. For home use we order 1 to 4,000 of corrosive sublimate with weak boracic-acid solution.—*Br. Med. Jour.*, Feb. 4, 1888. R. W. A.

Wright (J. W.) on Evulsion as a Means of Radical Cure of Pterygium.—A few years ago, before the anæsthetic properties of cocaine were discovered, I attempted to remove a large pterygium in the case of a man who was somewhat under the influence of liquor. I caught the growth near its apex with the forceps. When I was about to separate it from the cornea with the scissors, he made a desperate effort at resistance, and caught my arm with which I was holding the forceps so suddenly that I did not have time to relax my hold. It bled freely, and I was fearful that the eye was badly injured. After a considerable time I was allowed to cleanse the eye, when I found that the pterygium was entirely separated from the cornea and as far back as midway between the sclero-corneal junction and the caruncula lachrymalis.

That part of the cornea to which the growth had been attached was somewhat hazy, and presented the appearance of numerous small depressions not larger than pin-points, showing the points where the fibres had penetrated the cornea. The patient would not permit me to proceed farther—not even to excise the loose tissue remaining.

I recommended the application of cold water to the eye. He did not return for three weeks, at which time the detached tissue had contracted, and I could scarcely see any corneal opacity, or any other evidence of pterygium.

My method of treatment now is as follows:

After the base has been ligated the pterygium is separated from its attachment with the blunt hook, by running it under a small portion at a time, especially if the pterygium is large; first separating the thin connection between the ligature and the cornea; then a small portion of the corneal attachment at a time, until the whole is removed.

The loose tissue is excised as close to the ligature as possible, cold-water dressings are used, and the ligature is allowed to remain until the strangulated portion sloughs, when it, with the ligature, will become detached and pass off.

The advantage of this operation is the *complete* and *thorough* removal of the growth from the parts into which it has been imbedded, without the injury or superfluous removal of any normal tissue.—*Jour. Am. Med. Assoc.*, Feb. 11, 1888. R. W. A.

Taylor (Charles B.) on Operative Treatment of Squint.—The characteristics of my operation are, pinching up the conjunctiva just below the lower border of the internal rectus. I pass a small hook under the tendon, causing it to project beyond the upper border. Cut upon this, dividing the attachment to the sclerotic under the small bridge of conjunctiva, which is allowed to remain. The puncture and counter-puncture is an advantage, as it permits the escape of blood, and the upper border of the tendon, so liable to slip off the hook in the ordinary method, is here certainly secured. I usually divide both recti, but prefer to have an interval between the operations. Another point is the introduction, during anæsthesia, of a suture to prevent over-correction. One of the theories of squint is that of difference in refraction between the two eyes. An excellent method of compelling the weak eye to work is to paralyze the accommodation of the best eye with atropine.—*Brit. Med. Jour.*, Dec. 10, 1887.

Snell (Simeon) on Dividing the Rectus Tendon from Above in the Operation for Squint.—The procedure suggested is sub-conjunctival; hook and scissors are entered from above. From about 150 operations I think the advantages are distinct. The operator is behind the patient, which in the old method cannot be. This conceals the instruments in the case of children. It is simpler to cut down instead of up. As stated elsewhere, there is less tendency to sinking of the caruncle in my method.—*Brit. Med. Jour.*, Dec. 24, 1887.

THERAPEUTICS.

Gaucher on the Poisonousness and Therapeutic Applications of Boric Acid.—As a result of a series of experiments, the author finds that boric acid is innocuous when ingested in any doses in which it is necessary to employ it.

Applied to the denuded skin very little of it is absorbed, and it has no escharotic action. He considers it particularly useful in impetigo contagiosa, and in cutaneous

tuberculosis. He has also given it internally in some cases of phthisis, with the apparent result of improving the general health. The author also found that boric acid appeared quickly in the urine under the form of a boric ether, and employed it in several old men afflicted with prostatic hypertrophy and cystitis. Their cloudy urine, charged with muco-pus, became clear. He considers it preferable to the borate of soda because it has less astringency.—*La France Méd.*, Jan. 31, 1888.

Foot (A. W.) on a Case of Argyriasis.—In the case reported the solid caustic had been applied to the throat for eight years, and was followed by silver-staining of the skin and mucous membranes. Large quantities of the silver nitrate had undoubtedly been swallowed. As preferable to the silver nitrate the double hyposulphite of sodium and silver is free from the danger of producing argyria, while effecting all the therapeutical indication of the silver salts.—*Lancet*, Feb. 4, 1888.

Beaver (W.) on the Peroxide of Hydrogen in Diphtheria.[1]—The peroxide of hydrogen will, in all stages of diphtheria, pseudo-membranous croup, and ulceration of the mouth and throat, and stomatitis, act most admirably.

All physicians who have practised in districts periodically or occasionally visited by diphtheria, will recall the cyanosed condition of the little sufferer presaging death. Even after this condition plainly predicts poisoning of the blood by carbon, the patient can be quickly relieved by fifteen- or twenty-drop doses of the peroxide internally, diluted with one or more tablespoonfuls of water. The throat should be gargled or swabbed with a solution composed of equal parts of peroxide of hydrogen and water, every half hour or oftener, or the solution may be used with an atomizer. All articles used for wiping the face or mouth should be kept sprinkled with the peroxide, and all cuspidores or vessels should contain enough of the peroxide to destroy all germs contained in the sputa or excreta. This remedy is not intended to supplant such auxiliary treatment as may be indicated.—*Med. News*, Feb. 11, 1888.

Wick (D. M.) on the Salicylate of Ammonium for Fevers.—In a case of remittent fever, in a boy of six, calomel, quinine, veratrum, and sweet spirits of nitre had no beneficial effect; a very irritating eruption was produced, and the temperature ranged from 103° in the morning to 104° in the evening. About gr. ii. of the salicylate of ammonium were ordered in water every two hours. In eight hours the patient was found resting quietly, sweating profusely, and with a temperature of 99.5°. Rapid recovery supervened.

A boy, five years old, had been sick nearly one week with remittent fever when first seen. He was put on the orthodox treatment, which was continued one week, during which time his fever was never below 102° nor above 104°. He had a hot, dry skin all the time.

All other drugs were abandoned, and salicylate of ammonium, gr. ij. was given in water every two hours. In about eight hours his temperature fell to 99°, and he was bathed in perspiration. The dose was continued once in four hours. Next day there was no fever, tongue clean, skin moist, and the boy in every respect improved. He had no relapse, and was soon able to be around.

May P., a girl of eleven years, had measles. The disease pursued its usual course and the eruption receded as in other cases. But the fever, which had ranged high throughout (from 102° to 104°), continued. An active diarrhœa set in, her tongue was coated, and sordes was on the teeth. She was now in a semi-delirious condition, with a temperature of 105°. Mineral acids and small doses of opiates controlled the bowels. Despite the frequent bathing, quinine gelsemium, and aconite, the fever kept on as high as ever.

After five days of this course she was no better, save that her bowels were more quiet. The skin was dry, temperature 105°, with considerable nervous disturbance, and still semi-conscious. As the case was assuming a very serious aspect, all other medicines were dropped as in the former cases, and two grains of the ammonium salt were ordered every hour until she should sweat. The nurse said the next morning that after giving the fourth dose the patient began to sweat, and by the time the fifth was to be given her clothing was so thoroughly saturated that the time was lengthened to four hours. Her temperature was normal, pulse soft and regular, though weak, tongue moist for the first time in five days and showing evidence of becoming clean. From this time she

[1] See MEDICAL ANALECTIC, 1886, p. 32.

gained rapidly without one unfavorable symptom, and in one week was up, and soon recovered.

Nettie B., a frail and delicate girl of seven years, was attacked with whooping-cough, which ran a severe course for two weeks, and then insidiously became complicated with broncho-pneumonia. Temperature rose to 104°, breathing hurried, oppression excessive, the lips and face turgid and cyanotic, pulse rapid. A mixture of carbonate of ammon., acetat. potass., syr. ipecac., and tinct. nux vomica was given as a cardiac and respiratory stimulant, alternating with small doses of quinine. After using this treatment four days, the fever not abating and other symptoms becoming worse, all other drugs were abandoned, and two grains of salicylate of ammonium were given every two hours until free perspiration occurred, which was after the sixth dose. The fever subsided, respiration became easy, and expectoration abundant. The temperature did not return above 101° for several days. The remedy acted promptly in lessening the fever; but after the second and third invasion of the bronchi, with temperature of 104° and 105° (that after four weeks proved fatal), the salicylate of ammonium each time brought the temperature down to 101° or 101.5°.—*Jour. Am. Med. Ass'n*, Feb. 11, 1888.

Genois (L.) on Deodorized Iodoform.—The deodorant of which the writer advocates the use is purified naphthaline, to which a trace of turmeric has been added; this mixture will mask the characteristic odor so effectually as to challenge detection by the sense of smell alone.

The quantity of deodorant required to disguise the odor of a given quantity of iodoform is comparatively small; after a number of experiments, it was found that nine per cent. of the mixed substances was ample for the purpose. The following formulæ are suggested:

Deodorized Iodoform.

Purified naphthaline	7½ 8rs.
Powdered turmeric . . .	1½ grs.
Iodoform	91 grs.

Rub together until thoroughly mixed.

Ointment Iodoform.

Deodorized iodoform (as above) .	ʒ ij
Oil of almond	ʒ ss
Lanoline	ʒ vss. M.

Lanoline is suggested because possessing a strong odor of its own which assists in concealing the iodoform odor, and besides it is readily absorbed by the skin.

The deodorized powder can be used instead of the simple drug in the making of preparations for external application. For making an ethereal solution the turmeric should be left out, as it is not soluble in ether.—*Med. News*, Feb. 18, 1888.

Butlin (H. T.) on a Case of Acute Traumatic Tetanus, Successfully Treated by Large Doses of Salicin and Bromide of Potassium.—A. M., aged 26, a young man, of rather intemperate habits, cut his arm severely on June 30 1887, by thrusting his hand through a window. The wound appeared to be making good progress until July 15th, when he complained of pain in the epigastrium. In the course of the day his face began to stiffen, and there were twitches of the muscles of the face and of the back and legs. These grow worse until July 19th, when the risus sardonicus was well marked, and spasm was elicited by speaking sharply or loudly to him. He was placed in a warm room, which was fitted with carpets and curtains to deaden sound, and full doses of cloral hydrate and bromide of potassium were administered. But he grew worse; the breathing became laboured, the pulse very rapid. On July 22d he appeared to be actually dying; the respirations and pulse could not be counted, and spasms recurred with extreme rapidity.

At 1 P.M., a draught was given of salicin gr. xx, potassium bromide gr. xx, every two hours. At 5 P.M., the spasms occurred only at intervals of ten minutes, the pulse was stronger and numbered 120, and severe perspirations had set in. On the following morning, July 23d, the intervals between the spasms had increased to twenty minutes; he breathed easily, and the pulse was still stronger and less rapid. The draught was now ordered to be taken every four hours. The improvement continued during the next two or three days, but several days elapsed before he was free from pain in the epigastrium, and for nearly a fortnight it was necessary to draw off his urine. At the end of six weeks he was convalescent. The only trouble which remains is the stiffness of the muscles of the upper extremity, due to the direct effect of the injury.—*Br. Med. Jour.*, Jan. 14, 1888.

Graham on Uræmic Poisoning Resulting from the Administration of

Ether.—The patient had been operated upon for intestinal obstruction, only a small amount of anæsthetic being given. On the third day thereafter the patient died with uræmic symptoms, and the post-mortem showed the kidneys to be intensely cirrhosed, but the intestines normal. Previous to the operation the urine was carefully examined and found normal, as were the heart sounds, nor were there symptoms of diabetes.—*Canada Practitioner*, Feb., 1888.

MISCELLANEOUS.

Resection of Left Lobe of Liver.—There is hardly an organ in the body that has escaped the surgeon's knife. The liver has now been attacked, for Dr. Langenbuch[1] records a case in which he successfully resected the greater part of the left lobe, which had been extensively deformed by tight lacing, and had caused great inconvenience and trouble to the patient. The woman, about thirty years of age, was, in November, 1886, under treatment for erysipelas at the Lazarus Hospital, and when about to be discharged convalescent she begged that she might be relieved of a painful abdominal tumor that rendered life unbearable, and caused pain both on standing and on lying down. On examination a tumor of the size of the fist was detected in the epigastrium, dense, elastic, not fluctuating, moving with respiration, and its dulness continuous with that of the liver. The diagnosis lay between hydatid tumor and deformity from tight-lacing, although the latter condition usually involves the right lobe. An exploratory incision proved that the case was of this kind, but involving the left lobe, and probably for that reason producing the painful symptoms. For the large and indurated mass of liver substance in this situation overlies sensitive parts and organs, which it would compress against the convexity of the spine whenever the dorsal decubitus was assumed. Dr. Langenbuch decided that it would be advisable to remove the source of so much distress, especially as the portion of the lobe forming the tumor was practically cut off from the rest of the organ by a broad but ligamentous pedicle, and therefore it was functionally of no service. Accordingly, the pedicle was transfixed by ligatures, and the lobe excised. The same evening symptoms of severe internal hemorrhage appeared, and, on reopening the wound, the abdominal cavity was found to be filled with blood; this was sponged out, the bleeding vessels secured, and no further trouble arose from that source. The wound healed, but recovery was somewhat retarded by the development of ascites, which necessitated tapping on two occasions. It could not be determined how far the ascites was due to the cardiac debility and hydræmia resulting from the previous prolonged attack of erysipelas and the profuse hemorrhage, or how far it might have depended on the diminution of the hepatic circuit. There was œdema elsewhere, so the former hypothesis had some support. At any rate it was not permanent, and the patient left in February quite well. The portion of liver removed weighed about twelve ounces, and Dr. Langenbuch says that the case shows the feasibility of removing the lobe of a tight-laced liver when this gives rise to serious discomfort. He explains the involvement of the left lobe in his case to the following circumstances. Up to the date of her marriage eight years ago the patient had worn a corset, which she had discarded on becoming pregnant, and had not reassumed. She believes that the liver, displaced downwards and forwards by the corset, now became subjected to pressure from the abdominal bandage which the patient had substituted for the corset; so that, as a matter of fact, the precise deformity which caused the disorder resulted not from tight-lacing, but from its being omitted. This paradox would, we fear, add to the melancholy conclusion that once the evil habit is adopted it must be kept up if serious consequences are to be avoided.—*Lancet*, Feb. 4, 1888.

Pilley (W. J.) on a Case of Maggots in the Ear.—M. R——, a domestic servant, awoke on Oct. 31st feeling pain in the left ear. The pain steadily increased, although she applied poultices. Three days later she consulted me, complaining of intense pain in the left ear. On introducing a speculum moving white bodies could be seen. The ear was syringed, with the result that three maggots (larvæ of the common blow-fly) were removed. On again examining the canal with a speculum the sides were found to be slightly congested, as also was the mem-

[1] *Berl. klin. Woch.*, 1888, No. 3.

brane. Iodoform was blown into the ear, after which all symptoms soon disappeared.

I can imagine how easy it is for the eggs of the blow-fly to become deposited in the ear during sleep, especially in a country so infested with flies as is Queensland.—*Lancet*, Jan. 14, 1888.

Drewry (W. F.). Ninety-seven Ounces of Foreign Bodies in the Rectum.—The patient was a large, robust-looking colored woman, aged forty-six, among the chronic insane. Upon inquiry, I learned that this woman had long suffered from disordered bowels—diarrhœa, alternating with constipation. The discharges, which were thin, muddy, and very offensive, oozed from the anus in small quantities, attended with pain and tenesmus. The abdomen was distended (apparent ascites), and deep pressure over the left iliac region elicited pain.

On introducing into the rectum my forefinger, its tip came in contact with a hard mass, which, upon ocular examination through a speculum, proved to be some solid foreign matter. The enlarged rectum was completely impacted with bits of stone, glass, slate, brick, buttons, fruit-parings, clay, etc., to the amount of ninety-seven ounces, avoirdupois, which I subsequently removed, my hand being the only instrument used.—*Va. Med. Mo.*, Jan., 1888.

Roberts on Attempted Nephrolithotomy; Wound of the Diaphragm; Recovery.—A man, aged thirty-nine, had for the last two years suffered with pain in the region of the left kidney, which had troubled him almost incessantly. After careful examination of the case it was determined that there was sufficient reason to believe the pain due to renal calculus, and, therefore, that an exploratory operation in the lumbar region was justified. Accordingly, on May 20, 1886, I made an incision in the left loin, and at once came upon the left kidney. In order to get more room, it was determined to cut a few muscular fibres which extended across the upper angle of the wound a little distance below the surface. Accordingly, they were divided, and instantly the sucking of a large quantity of air into the pleural cavity showed that these fibres were a portion of the attachment of the diaphragm to the posterior wall of the abdominal cavity. The opening, which was a very small one, was of course close to the vertebræ. The tissue was not recognized as a part of the diaphragm before being cut, because it was posterior to the bulging portion of the diaphragm, which was seen at the bottom of the wound. The opening so made was closed by silk sutures, with no other difficulty than that it was difficult to get the sutures to draw the edges of the orifice close together on account of the muscular fibres being tensely attached to the bone. It would have been very easy to close a similar puncture situated further out in the flaccid portion of the muscle.

The surface of the kidney was felt with the tip of my finger without discovering any sign of stone. After exploring the kidney a small aseptic sponge, previously dusted with iodoform, and with a short string attached to it, was thrust into the wound against the injured diaphragm. The external incision was then closed with five wire sutures, the string attached to the sponge left hanging from the wound, and the parts dressed with carbolized oil and a bandage. The following day the wound was dressed with sublimate cotton, and on the third day the sponge was removed, at which time a large portion of the external wound had united by first intention. Several months later the patient expired, not from effects of the operation.—*Med. and Surg. Reporter*, Jan. 28, 1888.

Spencer (C. E.) on Boracic Acid Poisoning.—The patient was a young woman who, for a syphilitic necrosis about the ankle joint, had had parts of the tibia, fibula, and astragalus gouged out and the wound filled with boracic acid crystals. For fourteen days all went well. She then began to lose her appetite, and in a short time had nausea and vomiting, which grew progressively worse, so that finally nothing could be retained by the stomach. Lime-water, counter-irritation and cold to the epigastrium, morphia, ipecac, and all the various anti-emetics were used in vain. Her other symptoms were restlessness, insomnia, the little sleep she did get being very disturbed, almost constant hiccough, great weakness and emaciation, and a very marked cardiac weakness. Although her pulse was very weak, there was none of the compensating rapidity which generally occurs in heart failure. She had a rather severe coryza, the conjunctivæ were very red and inflamed, there was marked inflammation of the fauces and pharynx, some bronchitis, and an acrid discharge from the

anterior nares. Her tongue was red, glazed, and cracked. There was a very well marked papular erythema, the papules nearly coalescing over the face, neck, arms, and upper part of chest. These symptoms came on gradually and grew worse for three days, at which time she was very weak, though she had taken considerable nourishment by rectum. The dressing was then changed, and the symptoms here noted began to disappear, although it was ten days before she was as well as before they began.

The only drugs this patient had been taking were bi-chloride of mercury, one-thirty-second of a grain, and iodide of potash, eight grains, three times a day. These were discontinued when the nausea began, and resumed egain when it ceased. The unfavorable symptoms can hardly be ascribed to them. She took them for a month previous, and again since her illness, and nothing of the kind occurred.—*Northwestern Lancet*, Jan., 1888.

Gaudin (P.) on the Pathogeny of Nervous Accidents Following Explosions of Fire Damp.—In most cases of explosions in mines, dead bodies are taken out which present no external or internal lesion which can explain the death. Some miners escape instant death, live some hours or days, and die with symptoms of asphyxia. Others again, after a long period of syncope, mental depression, or nervous symptoms, finally get well.

In accounting for these symptoms, the author discards the theory of internal burns, commotion of the upper part of the cord, and poisoning by the oxide of carbon, and propounds the theory that the shock causes a sudden decomposition in the blood, which sets free its contained gases, producing gaseous emboli and other disturbances of circulation.—Thèse de Paris *La France Méd.*, Jan. 10, 1888.

Bramwell (B.) on Peculiar Symptoms from Lead Poisoning.—The man presented himself, complaining of dimness of vision, severe headache, and tremor affecting particularly the right hand, but distributed generally over the whole body. The acuity of vision was found on examination to be reduced to less than one tenth, and the fields very much restricted. Greens and blues could not be distinguished, and the color fields were much reduced. There was no optic neuritis. The fundus was, in fact, perfectly normal—a very interesting and rare condition in cases of "lead blindness." Under large doses of iodide of potassium and sulphate of magnesia purgatives, the headache had disappeared, and vision was now normal.—*Ed. Med. Jour.*, Feb., 1888.

Browning (W.) on the Occurrence of Coma in Sudden Spontaneous Brain Lesions.—According to the author, in adults free from relevant complications, embolism involving directly only extra-ganglionic portions of the cerebrum, does not cause coma. Conversely, where the diagnosis of cerebral embolism is warranted, primary coma indicates implication of the basal ganglia or brain-stem. The absence of coma does *not* preclude involvement of the said lower structures.

From the fact that more limited embolic injury involving other portions of the brain is frequently attended by coma, it follows that the location (or seat) of a cerebral lesion is one of the important factors in the causation of this symptom.

Wernicke's view, that the slighter disturbance of consciousness by hemorrhage into this region—as compared with hemorrhage into other portions of the brain—is owing to circulatory peculiarities, and hence to the absence of the factor of suddenness, is disproven. Of course, thrombosis also, under like conditions, would not cause coma.

Whether embolism of the Sylvian trunk will or will not cause coma, is a useless question. It depends on the structures supplied by that artery in any given case. It must not be considered that the above conclusions at all disprove the accepted view that the cerebral cortex is the seat of higher consciousness.—*Med. News*, Feb. 18, 1888.

Foerster (F.) on a Case of Hemichorea Rheumatica.—This case was remarkable principally because of the advanced age (seventy-six) at which the chorea developed. The sickness commenced with rheumatic pains. On December 8th, while engaged in rubbing the aching shoulder, the patient remarked a peculiar twitching movement of the fingers of the right hand; the motions became vigorous, extending to the arm, and in a very short time the whole right side of the body was involved. The movements were continuous, rhythmical, and quite vigorous.

The arm was in a state of the greatest excitement, the motions performed being alternate flexion and extension, pronation and supination, giving in all the impression of a well-intended movement. The leg was less active, being partly flexed and performing a swinging motion. The muscles of one side of the face were also involved, the face being thereby drawn into grimaces, while the tongue was in constant activity, interfering considerably with speech. The muscles of the trunk were also affected, causing a perpetual shifting of the position of the patient, and a constant rising and falling of the right shoulder. There was a slight systolic blowing sound over the apex of the heart. Neither morphia, atropia, codeia, nor the bromide of potassium gave the slightest relief. Chloral hydrate in ten-grain doses every two hours quieted the patient, and enough was given to keep the patient mildly narcotized all the time. Seven days of this treatment cured the patient.—*N. Y. Med. Jour.*, Feb. 11, 1888.

Roush (S.) on a Case of Hæmoptysis Dependent on a Foreign Body in the Lungs.—About two months ago P. S., male, æt. thirty-five years, came to my office for a troublesome cough attended with occasional hemorrhage from the lungs. Patient was emaciated, weak, appetite poor, rapid and labored respiration, bowels alternating with constipation and diarrhœa, and, in short, presented all the symptoms of phthisis well advanced. The chest was well developed, and physical examination revealed nothing abnormal except a few mucous râles in the region of the bifurcation of the trachea.

The family history was exceptionally good, there being no hereditary tendency to pulmonary disease whatever. The cough had been of nearly a year's standing, and, failing to find any other cause for the trouble, other than true pulmonary tuberculosis, I began treatment accordingly.

Under tonic treatment, a vegetable diet, and improved hygiene, the patient became decidedly better, and was, a few weeks ago, dismissed, and he resumed his work—being that of a manual laborer.

A few days ago, however, he contracted a severe cold, which again brought on paroxysms of coughing, and during one of these violent attacks he expelled, together with a considerable amount of muco-purulent matter and blood, a molar tooth.

Upon inquiring, I ascertained that about six years ago he received a blow on the side of the jaw which loosened one of his molar teeth from its socket, and, as he supposed, it was swallowed. This information made the case a plain one, and I did not hesitate to conclude that the cough and hemorrhage had been dependent upon the irritation and ulceration caused by the presence of this foreign body in the lungs.

Since the expulsion of the tooth, the cough and hemorrhage have almost wholly disappeared.—*Cincinnati Lancet-Clinic*, Feb. 4, 1888.

Quenu on Varices of Nerves as a Cause of the Pain in Varicose Subjects.—Sixty-seven patients formed the basis of the author's researches. Some of them consulted the physician not for varices, but for sciatic pains relieved by the horizontal posture. Among the sixty-seven cases there were eleven of sciatic neuralgia. Among fifty-six old cases the leg and popliteal space were tender on pressure in twenty, the thigh in five, and the buttock in three cases. The pains commence in the leg and mount up little by little into the thigh and buttock.

Varicose subjects complain also of weakness of the members, which can also be explained by varices of the nerves. The pains due to varices are relieved by elastic pressure, but it is necessary to carry the compression clear up to the groin.—*La France Méd.*, Feb. 11, 1888.

Cocaine as an Antiseptic.—Till now the attention of the profession has been directed principally to the therapeutic utilization of the analgesic and toxic virtues of cocaine and its salts. Dr. Luton, of Nancy, has remarked that during its administration in doses of twenty-five centigrammes, and even more, the divers secretions—sweat, urine, the products of suppuration, and even fæcal matter—lose their fetidity. He proposes to employ this substance as an antiseptic agent administered interiorily, and to experiment with it in the place of carbolic acid and of corrosive sublimate in the adynamic stage of typhoid fever. The author adds that cocaine thus administered, or more especially in the form of enemata, would act both as a neurosthenic and as a disinfectant.—*Lancet*, Feb. 11, 1888.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital.

VOL. V., NO. 9. March 1, 1888. WHOLE NO. 57.

CONTENTS.

	PAGE
Leading Articles	101
Occasional Report on Surgery	105
Therapeutics	107
Miscellaneous	112

LEADING ARTICLES.

Anæsthesia from Mixtures of Anæsthetic Gases with Oxygen.—Martin, of Lyons,[1] has produced long-continued anæsthesia by the administration of nitrous oxide gas with oxygen under pressure, according to the method of Paul Bert.

In his experiments the author uses a bell-glass with a capacity of 250 litres, sufficiently strong to sustain a pressure of 1½ atmospheres. An animal is introduced into this receptacle at 5 P.M., and the space is filled with the mixture of Paul Bert (nitrous oxide gas, 85 parts; oxygen, 15 parts). The pressure is gradually raised to 110, 115, and 120. Sleep comes on in about half an hour, and a flow of the mixture at the rate of about 15 litres per hour is established.

The next morning at six the animal is still anæsthetized, but subject to some dyspnœa. Three hundred and fifty litres of the gaseous mixture are made to pass through the chamber quickly, and the respiration becomes regular, and the ingress is again fixed at 15 litres per hour. Two hours later the respiration is calm, and remains so to the end of the experiment, which lasts seventy-two hours.

The animal being taken out of the bell-glass, it is soon noticed that its front paws begin to move, and it opens its eyes and looks about restlessly. In thirty-five minutes the animal tries to stand, and shivers as if with the cold The hinder extremities remain useless. After fifty-five minutes in the open air the animal walks, obeys commands, and seems to have all his senses, refusing, however, to eat. The next morning the animal appears to be in every way in a normal condition.

In the experiment detailed 2,500 litres of gaseous mixture were used, the carbonic acid exhaled being absorbed by some fresh lime placed in the bell-glass.

In a recently published paper on oxygen in chloroform narcosis (*Centralbl. für Chir.*, No. 35, 1887), Dr. Kreutzmann, of San Francisco, states[2] that the use of a mixture of oxygen and chloroform for anæsthetic purposes was first recommended by Neudörfer, of Vienna, who anticipated that such a mixture would, on inhalation, cause speedy insensibility without excitement, and be absolutely safe and free from the bad results of the ordinary anæsthetic agents. This recommendation, although Neudörfer's first trial was attended with the best results, has not been followed, in consequence of certain difficulties in obtaining by the original method the required mixture of gas and chloroform vapor. Kreutzmann has given up all endeavor to supply the chloroform in fixed doses according to Neudörfer's directions, and now, in order to administer the mixture in an efficient manner, he attaches, with the intervention of an exhausting pump, an elastic bag containing oxygen to Junker's chloroform apparatus. In this way oxygen in the place of atmospheric air is pumped through the chloroform, and the patient inhales oxygen impregnated with chloroform vapor. It is pointed out that some air is taken in at the same time, as it is impossible to exclude this by the mouthpiece.

[1] *L'Union Médicale*, Jan. 28, 1888.

[2] *London Med. Record*, Oct. 15, 1887.

Dr. Kreutzmann speaks very favorably of the results obtained from the use of this mixture in twenty-three operations of different kinds, performed by Dr. Morse, of San Francisco, on patients of both sexes and varying in age from seven to fifty-six years. In every instance the anæsthetic acted with extreme rapidity, and repeatedly after a few deep inspirations such a degree of anæsthesia was attained that pain was no longer felt, although reflex action was still maintained. In cases in which deeper narcosis was required further administration of the mixture always removed any tendency to struggle. Children and young subjects were rendered insensible in a remarkably short time, but with drinkers the administration lasted longer. In not a single case was any marked excitement observed. With slight anæsthesia no change took place in the pulse and respiration. In instances of deep narcosis the respirations were accelerated and the pulse frequency was diminished. In many patients the face became congested and covered by perspiration. After a state of incomplete anæsthesia the patient "came to" at once when the inhalation of the mixture had been arrested, and after a more prolonged and deeper narcosis there was for some time a quiet sleep, which, however, did not resemble in any way the deep coma observed after the administration of ether or of pure chloroform. Invariably the patient in recovering from the effects of the anæsthetic became conscious at once, and did not suffer subsequently from headache, vomiting, or nausea. Whether death from chloroform may be avoided by practising this mode of administration remains to be determined by further and more extended experience, but the small quantity of chloroform that is thus used, and the almost complete absence of any subsequent bad effects, permit us, Dr. Kreutzmann thinks, to entertain the best hopes in this respect.

Hadden (W. B.) on Three Cases of Obliterative Arteritis.—A fairly robust man of nineteen, a rag-sorter, presented himself December 10, 1887, complaining of pain, coldness, and loss of power in the right hand and forearm. He said that the affection came on gradually about three months previously, and that the tips of the fingers were first attacked, and then the hand and forearm. There was no history of injury or of prolonged pressure affecting the right upper extremity. He denied having had syphilis, and no history of cutaneous eruptions, sore-throat, or other syphilitic manifestations could be obtained. The patient, before the onset of his present illness, had never suffered from any serious disease. All the fingers ef the right hand were of a dull color, and extremely cold, but there was no sign of gangrene. The right radial artery was hard and tender, and no pulsation could be detected. The absence of pulsation and tenderness extended upwards into the brachial to about the middle of the arm. The ulnar artery, too, was carefully examined, but not the slightest pulsation was detected. The right subclavian artery above the clavicle was remarkably prominent, and pulsated vigorously. A thrill was detected on palpation. The heart was not hypertrophied. No bruit was audible, but the second sound at the right base was much accentuated. The vessels of the left upper extremity were natural.

It may prove of service to give a brief general account of two cases observed by the author and that recorded by Mr. Pearce Gould. Two of the patients were males, and both were nineteen years old; one was a female, aged thirty-five. There was no history of syphilis in any of the cases. No cause could be assigned for the affection, except in the case of the woman, in whom pressure on the vessels during sleep was possibly the exciting agent. In all the cases the right upper extremity was the part affected, and the vascular obstruction was observed to spread from below upwards in two of the cases, and from the patient's statement this was probably so in the other. The arterial vessels affected were hard, tender, and pulseless. The subclavian artery in two of the cases formed a tense pulsating swelling, resembling an aneurism. In none of the patients was there any reason to suspect cardiac valvular disease; but in one some hypertrophy of the heart gradually ensued. The disease in two of the cases extended over several months, was accompanied by severe local pain, and had a tendency to spontaneous arrest. In the same two patients the tips of some of the fingers became gangrenous, and it may be mentioned that the affected vessels remained apparently impervious after the disease had become quiescent. The etiology of this rare affection is still unknown, and its pathology calls for further research.

The three cases discussed have so many clinical features in common that one cannot help thinking that they form a distinct morbid class, since they differ in many important points from the few instances of vascular obstruction recorded under the name of "arteritis obliterans."—*Lancet*, Feb. 11, 1888.

On the Treatment of Lithæmic Conditions.—In a recent paper[1] on the "Influence of Salicylic Acid and its Salts on the Excretion of Uric Acid," Dr. Alexander Haig stated that salicylic acid, while it increased urinary acidity, did not in any way diminish the excretion of uric acid. Acids given while salicylate was present in the circulation had no longer the power of diminishing the excretion of uric acid. This action of salicylic acid and salicylates was of importance in explaining the value of these drugs in gout, rheumatism, and other diseases connected with uric acid. Excessive excretion of uric acid taking place under salicylates was not accompanied by any headache, and salicylates had previously been found useful in this headache. The action of acids and alkalies on uric acid excretion was probably due to the fact that alkalies increased and acids diminished its solubility, and the same with the exceptional action of salicylic acid, for salicyluric acid, which it was supposed to form, differed from uric acid in being very greatly more soluble in water, and probably also more soluble in dilute acids. Benzoates did not act in the same way as salicylates, probably because hippuric acid, which they formed, was less soluble than salicyluric acid. Both uric and salicyluric acids were present in the urine passed under the influence of salicylates; this was possibly due to the salicylate acting on the uric acid in the blood, and not on the uric acid which was excreted direct from the kidney. Headache was present with the rush of uric acid which took place under alkalies, but not with the rush under salicylates; possibly, therefore, under salicylates, uric acid was present in the blood in a different chemical combination, as salicyluric acid. Dr. Haig considered that he had established one form of headache, a uric acid headache, which he could produce and stop by increasing or decreasing the amount of uric acid. Women, he thought, suffered easily from small pieces of meat; the French from acid wine, for the acid helped the retention of their uric acid, and they did not get rid of it by exercise. A sensitive nervous system reacted to uric acid very easily. In a paroxysm of acute gout, salicylates were too late, for it took them some time to penetrate to the cartilages where the uric acid already was, but taken as a prophylactic they did much good.

Knaggs[2] states it as his opinion that the best remedy for the gouty state is the salicylate of potash. He asserts that for every cwt. of the salicylate of soda only about one ounce of the potash salt is sold. In practice, however, it will be found preferable to prepare it freshly by adding the salicylic acid to a solution of bicarbonate of potash, thus:

℞ Acid. salicylic. . . .	½ to 1 drm.
Potassæ bicarb. . .	1½ drm.
Aquæ chloroformi . .	ad 8 oz.

Add the chloroform water by degrees, and do not cork the bottle until after the effervescence has gone off.

Sig.—Two tablespoonfuls to be taken every four hours, or oftener in the earlier stages.

During the last two years he has treated a considerable number of cases of gout exclusively in this manner, and, so far, has found nothing to equal it, since it rarely fails to effect an improvement—often a rapid one—in the condition of the patient. The salicylate of soda will not be found satisfactory in these cases any more than the bicarbonate soda would; for it is well known that the product of uric acid with a soda base is insoluble, while salicylic acid alone, although it has been strongly recommended by several observers, is so insoluble in water and so nauseating, and probably injurious to delicate tissues, that it is taken with great difficulty.

Of all the alkalies, the salts of potash are generally acknowledged to be most powerful solvents of urate of soda, perhaps even more potent in this respect than preparations of lithia itself. By the administration of salicylate of potash the urate of soda is acted upon and urate of potash and salicylate of soda, both of which are freely soluble salts, are formed, while the free uric acid is brought into contact with the drug, when salicylate of

[1] *Brit. Med. Jour.*, Jan. 14, 1888.

[2] *Provinc. Med. Jour.*, June 1, 1887.

potash is the result, which is at the same time effectually and thoroughly eliminated from the system, principally through the kidneys.

In the rare event of it not being well tolerated, the salicylate of ammonia may with advantage be substituted, or the carbonate of ammonia may be added to the mixture containing the potash salt. The importance of freely diluting this remedy must not be forgotten.

When the acute local symptoms have subsided, and the pulse and temperature have become normal, the salicylate of quinine may be given in doses of from one to three grains thrice daily. It is an excellent tonic for gouty subjects, as well as an aid towards completing the cure.

With reference to colchicum Yeo[1] says: "Colchicum, I maintain, is one of the most valuable remedies, when judiciously given, for most of the morbid manifestations of the uric acid diathesis, and, so far from being a dangerous vascular depressant, I have shown that, in chronic gout with subacute exacerbations, moderate doses of colchicum restore regularity and strength to an irregular and feeble pulse."

With reference to the use of the salicylates he says: "I should prefer myself to treat attacks of acute gout with colchicum, and, until more fully convinced than I am at present of the value of the salicylate of soda in chronic gout, I should prefer the employment of a less depressing remedy. I believe it is chiefly of value in those cases in which the uric acid and the rheumatic diathesis are combined.

"The benzoates of sodium and lithium have been largely employed in the treatment of uric acid deposits since their advocacy by Garrod. Latham has stated that benzoic acid acts by combining with glycocin, and so preventing the formation of uric acid, and that it passes off in the urine as hippuric acid. The value of the benzoates has, however, been warmly contested, and I am myself, by no means, convinced of their efficacy. It has been stated by Brunton, that if benzoic acid is given it is found unchanged in the blood, that the change into hippuric acid occurs in the kidneys. Senator speaks of the 'temporary popularity' of benzoates of soda and benzoic acid as 'based on chemical theories, some of which were wholly erroneous,' and adds that these 'remedies have fallen into just oblivion.'"

Parzevski[2] gives one to two drachms of the benzoate of soda in uræmia, each day, preferably in capsules, because of its disagreeable odor. It can be given in solution by the rectum. Under this treatment the uræmic attacks become shorter, the convulsions less frequent and severe, and finally cease to occur. The patients awake from the deep sleep, which follows the use of the drug, perfectly conscious. Administered during the first stage of an uræmic attack, the remedy frequently aborts it. It lessens and very often entirely checks albuminuria when present.

Drs. Posner and Goldenburg (*Zeitsch. f. klin. Med.*, xiii., Hft. 6)[3] have made some experimental observations upon the solubility of uric acid in some of the more notable mineral waters and in alkaline solutions. Their experiments lead them to suggest that in cases of the uric-acid diathesis, especially in acute attacks of gout, the best and most powerful of such waters are those of Vals and Vichy. Less costly is the Fachingen; but others, such as the much-prescribed Wildungen, are not so efficacious as the prescription of bicarbonate of soda, in doses of from 45 to 75 grains. per diem, with plenty of water. Next in solvent potency comes Cantani's powder of sodic bicarbonate, lithia, and potassic citrate, or lithium carbonate alone. In cases where only the diathesis has to be dealt with, *i. e.*, in the intervals of or apart from acute attacks, the Fachingen water is suitable, continued for a few days, or the weaker springs, and, as drugs, borocitrate of magnesia, borax, or Cantani's powder. The urine should not, however, be allowed to become alkaline. The treatment of actual calculi is more difficult. Small concretions and gravel may be dissolved by a six days' course of Fachingen water, for experiment showed that at the temperature of the body this water reduced the weight of a portion of pure uric acid gravel to the extent of 10 per cent. But in the cases of large calculi such a result cannot be expected, and the treatment by these means of vesical calculus would be hopeless.

The rather marked diversity of opinion on the part of different observers concern-

[1] *Brit. Med. Jour.*, Jan. 14, 1888.
[2] *Med. Obosr.*, No. 5, 1887. *Bull. gén. de Therap.*, Dec. 15, 1887.
[3] *Lancet*, Feb. 4, 1888.

ing the relative merits of remedies may be due to a confounding of pathological conditions as explained by Latham. He draws[1] a sharp line of distinction between gout and the uric acid diathesis. The latter could exist and show itself in various ways without developing gout, as in gravel, calculus, etc. For the development of gout there must be first the uric acid diathesis, and then another diathesis superimposed, so to speak, upon it for the uric acid to act upon. He would leave gout out of the question, and confine himself to the treatment of the uric acid diathesis alone. In order to arrive at proper data for the treatment of the uric acid diathesis, it must in each individual case be determined whether the excessive formation of the acid was due (1) to imperfect metabolism in the muscular tissue, or (2) to imperfect metabolism in the liver, and (3) not the least important, a clear conception must be formed as to the constitution and formation of the acid itself. As to treatment, there must be moderation in all things. Moderate exercise, moderation in diet, and moderation in nervous expenditure, which last included mental work, worry, grief, or anxiety. These were the first rules to be laid down, and if they could be enforced, then certain drugs would materially help to lessen the excessive formation of the acid, or to promote its elimination. His view of uric acid formation was that it resulted not from destructive but from constructive metabolism. The treatment of the uric acid diathesis resolved itself into this: to diminish in all ways the amount of glycocin brought to the liver, and to promote the function of the liver, so that the normal assimilation of this substance, which, combined with urea, forms uric acid, should not be interfered with. By moderate muscular exercise the glycocin in the tissues underwent its proper metabolism.

OCCASIONAL REPORT ON SURGERY.

BY G. B. PHELPS, M.D.

McKell (J. B.) on a Non-Expensive Splint Dressing.—To make a cheap, strong, and comfortable splint the author recommends the following:

Make a solution of: gum shellac, 1 pound; sodii borate, 1 drachm; alcohol (98 %), 1 pint.

Old cloth, washed and dried, or new cloth, is then cut to fit the limb, when it is strongly heated and painted with the above solution until saturated. It is then moulded to the limb, and very soon hardens, and, at a temperature below 100° F., cannot be bent. Holes may be punched in the splint to allow evaporation from the skin to take place.—*Cincinnati Lancet-Clinic*, February 11, 1888.

McBurney (Charles) on the Radical Cure of Hernia, with Special Reference to Open Treatment of the Operation Wound.[2]—Believing that the strongest cicatrix and the one best adapted to prevent recurrence of a hernia is to be obtained by allowing the operation wound to heal by granulation, the author adopted the following method:

With the usual antiseptic precautions, a free incision is made, beginning opposite the internal ring and extending to the lower end of the sac. The incision is rapidly deepened at the outer concave edge of the external ring, as, when that is freely exposed, it is easy to follow the sac downward. The sac is then dissected out to its lower end and stripped from all its attachments to the cord, this stripping process being most easily begun at the upper end of the sac. The outer wall of the canal is then split up to the internal ring, thereby enabling one, as Riesel[3] has pointed out, to lift the sac, neck and all, vertically from the body, and so apply a ligature most evenly and perfectly at the junction of the sac and the general peritoneum. The sac should always be opened before applying the ligature, as when this is done with care no additional risk is run, and, the sac being open, it is easy to demonstrate that no portion of intestine or omentum is adherent to the interior. The operator's left forefinger being then introduced into the neck of the sac, and the sac drawn thoroughly out by the right hand, the ligature can be tightened by an assistant over the tip of the operator's finger. This insures positively that the sac is tied high up, and that no intestine or omentum is included.

[1] *Brit. Med. Jour.*, Jan. 14, 1888.

[2] [In the MEDICAL ANALECTIC, July, 1887, and January 19, 1888, the modern treatment of hernia was reported, and for that reason the first portion of this instructive paper is not abstracted here.—G. B. P.]

[3] *Deutsche med. Woch.*, 1877, pp. 449, 467.

If adhesions exist between the wall of the sac and intestine, these should be broken down, if this can be easily done; if not, a thin layer of sac-wall, including the intestinal adhesion, should be dissected off. If any but a very minute portion of omentum is in the sac, whether it is adherent or not, it is tied off very securely with catgut, and the stump (which should be large to avoid slipping of the ligature) is returned to the general cavity.

In the case of femoral hernia, the process thus far is the same, excepting that none of the short anterior wall of the femoral canal is cut, as it is very easy in these cases to carry the ligature as high as Gimbernat's ligament, and there tie it. There now remains a long wound in the case of inguinal hernia, which includes the whole length of the canal to the internal ring. The bottom of this wound is formed by the fascia transversalis with the peritoneum behind it, and the conjoined tendon and the two deeper muscles above; Poupart's ligament and a strip of external abdominal aponeurosis below. The aim being to mat all of these tissues together by a firm cicatrix, the author now sews together, on each side of the wound, from the internal ring to the spine of the pubes, the various layers forming the abdominal wall, excluding, of course the fascia transversalis and the peritoneum. Six or eight interrupted stitches on the upper side of the wound bind into one thick edge the skin, the external abdominal aponeurosis, including the inner pillar of the ring, and the transversalis and internal oblique muscles and conjoined tendon. As many more stitches on the lower side of the wound bind together the skin and Poupart's ligament, including below the outer pillar of the ring. This stitching is done to insure patency of the wound throughout its entire depth and to provide against the possibility of the formation of a feeble union between any two layers on opposite sides of the wound. The whole of the canal, including the stump of the tied-off sac, must now be filled up by granulation.

To lessen the size of the wound, three or four large catgut stitches are now carried through the thick edges of the wound, the cord being left below them, and the edges loosely brought together. Below the site of the external abdominal ring, the wound in the scrotum is closely sutured, and, if necessary, drained. A strip of iodoform gauze is then packed in the wound, a firm pad of the same material above that, and then a complete and firm antiseptic dressing with spica bandage applied. This dressing is left on ten days or two weeks, when a granulating wound is found. The wound heals in about six weeks, during which time the patient must remain in bed.

When the wound is soundly healed, patients get up and go about, always being told *not* to wear a truss, for a repaired wound placed between two compressing forces—the truss without and the abdominal distension within—must necessarily become thin and weak.

In the case of femoral hernia, the sac having been tied as high up as possible, the tissues forming the walls of the wound are stitched in a similar manner. Supposing the wound to extend from above downward, it is easy to stitch the upper angle of the skin wound by two sutures to the lower border of Poupart's ligament. The skin at the inner side is stitched to the iliac portion of the fascia lata, and that at the outer side and below to the fascia lata forming the outer and lower edge of the saphenous opening. This process inverts the skin very markedly: and here also a few stitches from one side to the other partially close the wound and relieve tension. The wound is then closely packed with iodoform gauze, and a strong compress applied.

The advantages maintained for this open method of wound treatment are:

1. That in inguinal hernia one is able, after laying open the canal; to very evenly and completely tie off the sac.

2. That, the wound being open; no drainage is required, and the risk of abscess and septic complications is reduced to a minimum.

3. That the walls of the canal are united throughout by strong cicatricial tissue.—*N. Y. Med. Jour.*, Jan. 21, 1888.

Ball (James) on the Treatment of Ulcers by the Transplantation of Large Pieces of Skin after Thiersch's Method.—While skin-grafting by Reverdin's method, which consists in the placing of small pieces of skin at intervals on a base of healthy granulations, is known to, and practised by, surgeons everywhere, the treatment of ulcers by the removal of the diseased tissues and the transplantation of large pieces of skin—a process which is

known in Germany as Thiersch's method of skin transplantation—is, I believe, but little known to English and American surgeons, and but rarely practised by them. The essential principles of this method are:

(1) That the part to be treated be prepared by the removal of all unhealthy granulations and diseased tissues generally, and be rendered thoroughly aseptic.

(2) That the skin to be transferred to the bed thus prepared be thoroughly cleansed, rendered aseptic, and carefully removed and applied with its under surface closely in contact with the base of the wound in such a manner as to cover it completely.

(3) That the wound be kept aseptic throughout, and disturbed as little as possible.

In preparing the ulcer it will often be necessary to dissect away the skin on which it is situated throughout its whole thickness. Sometimes, even, especially on the shin—one of the commonest sites for old ulcers—it will be necessary to remove the periosteum and perhaps chisel away the outer surface of the bone over a considerable area. This, of course, involves a good deal of bleeding, whether an Esmarch's bandage has been used or not; and it may be necessary to apply a compress firmly over the wound for an hour or two before transplanting the skin. In many cases, however, it will be sufficient to scrape away the granulation bed with a Volkmann's spoon, in which case there is usually no delay from hemorrhage. The skin to be transplanted may be taken from any convenient part of the patient's body, or from another person altogether. It is removed in strips with a sharp knife, or, preferably, a broad-bladed razor. The skin is to be taken to a depth sufficient to secure as nearly as possible the whole thickness of the epidermic layer, the rete Malpighii being the most desirable part. It does not matter if the papillary layer of the true skin is partially removed, but the corium should not be included.

The operation is generally performed as in the following case, and is the method now largely used by Schede, of Hamburg, and other German surgeons.

The patient was anæsthetized, and the leg on which was a large chronic ulcer was thoroughly cleansed and disinfected with bichloride of mercury. The whole space covered by the ulcer was dissected out, leaving a margin of sound skin. The tissues beneath the flap were quite healthy. To stop the bleeding a temporary compress was applied and left in place while the thigh was carefully cleansed.

With a sharp razor strips of skin about three quarters of an inch wide and an inch and a half long were removed from the thigh and placed on the wound, from which the compress had been taken. Over these bits of skin small pieces of silk-isinglass plaster were placed, at intervals of about half an inch, after having been moistened in sublimate solution. An antiseptic dressing was then applied. This dressing was removed on the fifth day and the wound was healed on the thirtieth day.

The writer reports six cases treated successfully by this same method, and in concluding says:

"These cases have no special interest in themselves, but they demonstrate the ease, certainty, and rapidity with which skin may be reproduced by this method on ulcers which cannot otherwise be induced to heal. As to its applicability, there is no class or variety of non-specific ulcer which cannot be immediately prepared for the reception of flaps of skin, nor does the size of the ulcer increase the difficulty or delay the healing. In very large ulcers, skin may be taken from a limb about to be amputated or from one or more volunteers independent of the patient. The wounds made by the removal of the skin flaps being very superficial heal rapidly, and are not followed by contraction or other ill effects of cicatrization."—*Canada Med. and Surg. Jour.*, Jan., 1888.

THERAPEUTICS.

McConnell (J. F. P.) on Some Uses of Cannabis Indica.—It is in certain conditions in which apparently the use of cannabis is not so well known or widely employed in this country that the writer invites attention.

One of these conditions is anorexia—loss of appetite consequent upon exhausting diseases, such as prolonged fevers, diarrhœa, dysentery, phthisis, etc. This, a very common circumstance in India, causes at times much anxiety to the physician. The stomach suffers from the same debility as the other organs of the body, and there is a repugnance to and intolerance of food in almost every form, which does not al-

ways yield to acids, bitters, and nux vomica as usually prescribed. In such cases cannabis indica in small doses (♏ v.–x. of the tincture or gr. ¼–½ of the extract have been found very useful. The former preparation may be ordered in mixture (emulsion), with a small quantity of mucilage and simple syrup, and flavored with rose-water; the latter as a lozenge or *bonbon*,—the extract being rubbed up with white sugar, gum acacia, etc., to suitable consistency. Such a mixture or lozenge given three times a day, half an hour before meals, will frequently, in two or three days, bring back appetite for food and promote its digestion. I need hardly say that both these preparations are very palatable and readily taken by even fastidious patients.

It is well known that consumers of the drug in India have, as a rule, voracious appetites,—a fact or indication which appears to have been lost sight of in practical therapeutics.

Another condition is dyspeptic diarrhœa and the diarrhœa which is associated, more frequently in the tropics than here, with defective action of the liver and deficient secretion of bile, and which constitutes the earliest and most prominent symptom of that obstinate and specific disease the diarrhœa alba of the tropics (hill or tropical diarrhœa). Speaking more particularly of the latter affection, a characteristic feature is the tendency to action of the bowels soon after meals, and the consequent hurrying of the imperfectly digested food through the intestines, accompanied by remarkable and active vermicular movements of the latter, with much flatulency, borborygmi, etc.

In the earlier stages of this disease cannabis often proves of great service in controlling the diarrhœa. But even in more advanced cases of tropical diarrhœa cannabis will sometimes prove very useful. I have most usually prescribed it in the form of mixture, beginning with ♏ x. of the tincture and gradually increasing the dose to ♏ xv., xx., or even xxx., three times a day or oftener. A suitable combination is the following:

℞ Tincturæ cannabis indicæ. . . .	♏ x.–xx.
Bismuthi subnitratis	grs. x.
Mucilaginis acaciæ	ʒ ss.
Spirit. chloroformi co.	♏ xx.
Aq. cinnamomi *vel* aq. menth. pip.,	℥ i.
	Misce.

This mixture may be given before or after food, preferably the latter, and more particularly when the dose of the tincture is increased. By exhibition soon after food the liability to unpleasant symptoms (headache, giddiness, hallucinations, etc.) is greatly reduced, even in persons who are very susceptible to these effects of the drug.

In both true tropical diarrhœa and the more simple dyspeptic diarrhœa cannabis has this distinct advantage,—that it in no way interferes with the bile-forming function of the liver, as opium undoubtedly does; and yet the latter drug, though so valuable in other forms of looseness of the bowels, is apt to be incautiously used, and to my knowledge has been thus used with disastrous results, the proper nature of the above affections and their primary dependence upon altered hepatic function not being rightly comprehended.

The third and last condition in which Indian hemp has been found useful by me is in cases of chronic cardiac disease and in chronic Bright's disease as an hypnotic.

In cases where there is distressful sleeplessness and general inquietude, rendering the sufferer's condition most miserable, where the heart is enfeebled as well as over-taxed and chloral seems inadmissible, or, on account of the engorged state of the lungs or the defective action of the kidneys, opium must be avoided,—in such cases the administration at bedtime of ♏ xv.–xx. of the tincture of cannabis indica, combined with a small dose of chloral (grs. x.) and 3 ss of bromide of potassium, will often act magically in giving not only sound and refreshing sleep for several hours, but also in greatly alleviating the general disquietude and distress of the patient; and that this effect is to be attributed to the cannabis indica and not to the combination of chloral and potassium bromide (as might by some be supposed), I have assured myself of by check experiments, both on the same and on different patients, on many occasions.—*Practitioner*, Feb., 1888.

Herman (G. E.) and Fowler (C. O.) on the Effect of Ergot on the Involution of the Uterus.—The authors pointed out that the recommendation of a mixture containing ergot during the lying-in period, was based upon a general knowledge of the action of such drugs and of the process of involution. No observations had been

made, so far as they were aware, as to the actual effect of this treatment upon the process of involution. They had sought to ascertain its effect by measuring the height of the uterus above the pubes on successive days of the lying-in, in two sets of patients—one set (fifty-eight in number) treated with an ergot mixture for a fortnight after labor, the other set (sixty-eight in number) given a single dose of ergot after labor and no more. They found that in the cases treated by the continuous administration of ergot, the uterus diminished more rapidly in size than in those in which one dose only was given. They compared the two sets of cases as to the duration of the lochial discharge, but on this they did not find that the ergot treatment produced any appreciable effect.

In the discussion of the above paper Dr. Boxall contrasted two series of cases, each referring to 100 patients. Every alternate patient admitted to hospital was given a mixture three times a day, containing ext. ergotæ amm. ℥ xv. for a dose, during the first three days of lying-in. To avoid fallacy in the comparisons, the two series of observations were carried on simultaneously. The ergot mixture was given in the first series. In the second its routine administration was omitted, but in the series were included thirty-one patients, for whom, on account of hemorrhage, severe after-pains, etc., ergot was subsequently prescribed. The results were presented in a tabular form. By contrasting the two series of cases Dr. Boxall concluded: (1) That though the routine administration of ergot during the first three days of the puerperium exercised no appreciable effect on the date at which the lochia ceased (in this respect confirming the observations of the authors of the paper), the practice of giving ergot mixture during the three days following delivery tended to prevent the formation of clots, and to hasten their expulsion, and to diminish the frequency, intensity, and duration of after-pains. (2) That if omitted at first, but given after, the ergot mixture tended to promote the expulsion of clots and to relieve after-pains. Dr. Boxall considered that (*a*) the routine practice, which he had followed, of administering a douche at 110°–115° F. not only immediately after labor, but also twice a day during the puerperium until the lochia ceased (a powerful stimulant to the uterus); (*b*) the ergot which was given in every case immediately after labor, and (*c*) the ergot mixture which was prescribed subsequently in thirty-one of the cases included under the second series, all tended to lessen the difference which he had shown to exist between the two, and that in consequence the beneficial effect of the ergot mixture was even greater than that shown by the figures given in the tables.

Dr. Dakin reported observations as to the effect of systematic administration of ergot for some days during the puerperium on cases in the General Lying-in Hospital, while he was house-physician. They did not support the view which the authors took, but showed that the average day when the fundus had sunk to the brim was 9.12 when ergot was given once only, and 10.3 when ergot was given daily for three days. There were, however, other fallacies than those named by the authors, for, in addition to the condition of bladder, rectum, thickness of abdominal wall, and weight of the uterus in the pelvis, there was the condition of the uterine axis, whether fixed or inclined antero-posteriorly or laterally. He had found in a number of consecutive cases taken at random that one sixth of the uteri were in the axis of the body. These ought not to be compared with cases of anteflexion and version usual to the uterus during the puerperium, as there might be a difference of three inches or more on this account alone. In one of Dr. Dakin's cases the fundus was found one day in the left hypochondriac region nine inches from the pubes, whereas in the next it was to the right of the middle line, and only measured five inches and a half. He agreed with Dr. Boxall that the lochia were a better criterion of the rate of involution, and in this his own figures did not agree with the authors, for, with one dose of ergot the average was 9.8, with three days of ergot 11.6. With reference to the retention of clots and the occurrence of after-pains, he found that, out of 92 cases where ergot was given for three days, 51 (55.4 per cent.) had after-pains and 22 (23.9 per cent.) passed clots. Out of 103 cases where only one dose of ergot was given, 64 (62.136 per cent.) had after-pains and 37 (3.592 per cent.) passed clots, so that the ergot cases had fewer after-pains but passed more clots. The unergotized cases, like Dr. Boxall's, passed clots up to the tenth day, whereas the

ergotized ones passed no clots after the sixth day. It seemed that the continuous use of ergot, by keeping up a tonic state of contraction, instead of allowing normal alternate contraction and relaxation, would tend to favor retention of clots, and to prevent the normal process of involution.—*Br. Med. Jour.*, Feb. 11, 1888.

Francis (J. A.) on Ergot and Acetic Acid in Post-Partum Hemorrhage.—The liquid extract of ergot is very unreliable in cases of uterine inertia, and I have been grievously disappointed with preparations of ergot and ammonia in several instances. I have been equally pleased at the quick action of vinegar, given after ergot had failed, especially when followed by brandy or ether. Having experimentally given a wineglassful of vinegar several times, without ergot, I have found little benefit result. Arguing by analogy, I made the following mixture: ℞ Liq. ergotæ, acid acetic. concent. aa ℥ j; ether. sulph. (s. g. .735) ℥ iv. This should be put into a three-ounce bottle, well corked, and shaken thoroughly. I administer of this mixture three teaspoonfuls in a wineglassful of water, and having used it now for a considerable time, I am delighted with its efficacy in causing contraction and giving a refreshing sleep after a short interval, with little or no complaint of after-pains.—*Br. Med. Jour.*, Feb. 11, 1888.

Thompson (G.) on the Use of the Hydro-Bromate of Hyoscine.[1]—The author finds that in mania of any form the hydrobromate of hyoscine is the best calmative which has yet come to his notice. In some cases of general paralysis attended by busy restlessness, with dry skin, and some suppression of urine, a small dose puts the patient in a much more comfortable state. In fact in any sort of mania which appears to be accompanied by some form of cerebral "disorganization," as in old age, the patient is much improved by the treatment. Should the drug in other hands prove to be an anodyne without being accompanied by much stupor, it will be an invaluable addition to the materia medica.—*Lancet*, Feb. 4, 1888.

Picronitrate of Ammonia in Malarial Fever.[2]—In a Bulgarian medical journal, Dr. A. Golovina, lady physician to the Varna Town Hospital, writes that she tried picronitrate of ammonia in ½-grain pills four times a day, in seven cases of malarial fever of quotidian type. In five, the paroxysms ceased to recur (in one case from the second day of the picronitrate treatment, in three cases from the third day, and in one from the sixth). Three of the successful cases were of recent origin, and two fairly old. The quinine treatment had been previously tried in three of them (including the inveterate ones) without result. In a sixth patient, however,—a lad with quotidian fever of two and a half months' standing—a seven days' course of the picronitrate utterly failed to arrest paroxysms, the latter subsequently disappearing in two days under quinine (8 grains, twice daily). The picronitrate apparently gave negative results also in Dr. Golovina's seventh case. No unpleasant secondary effects were ever observed.—*Lancet*, Feb. 11, 1888.

Glycerine Enemas in Constipation.—Attention has already been called[3] to the method of exciting the lower bowels to increased peristaltic action by injecting into the rectum a drachm or so of pure glycerine. It is our advice that this remedy be so used with caution, always under a physician's orders, and only for the relief of very transient conditions. Glycerine, it should always be remembered, has tremendous dehydrating powers, and if habitually used on a delicate mucous membrane, cannot but exert finally a deleterious action upon the rectum. Whether this local irritation will result in any thing more serious than a passive hyperæmia of the parts, experience alone can tell; but we fear the indiscriminate and prolonged use of the remedy may induce cicatricial narrowing of the gut or predispose it to malignant disease.

That the remedy is gaining a foothold is evidenced by the report of its successful employment in a case of intestinal obstruction.[4] We are rather surprised by this writer's hearty endorsement, as it seems very evident that he fully understands its mode of action. He says: "I consider it probable that portions of the injected glycerine rapidly passed the sigmoid flexure and became diffused throughout the colon and possibly through some folds of the small intestine. The result of such con-

[1] See MEDICAL ANALECTIC, 1886, pp. 1, 303, 402, 433, 438.

[2] See MEDICAL ANALECTIC, 1887, pp. 447, 448.

[3] MEDICAL ANALECTIC, 1888, p. 23.

[4] Glycerine Enemata in Intestinal Obstruction, by Edward R. Mayer in *Med. News.*, Feb. 25, 1888.

tact would be, not immediate and direct hyperæmia of the surfaces exposed to it, but, first, anæmia of the same with irritation caused by the exosmotic withdrawal of the watery contents of the capillaries and submucous tissues, along with a rapid increase of the liquid contents of the parched intestines, and then, as succeeding the shock, subsequent hyperæmia, increasing afflux of blood and vital action, with a more extended basis for reflex stimulation of the great splanchnic centres, resulting in powerful peristaltic contractions upon tubes rendered, by the presence of the then diluted glycerine, more full of liquid contents, and offering sufficient resistance to the contracting muscular coats to work upon."

Employed, as in this case, to overcome a transient obstacle, of course it is not so likely to do harm as when used as a palliative measure in chronic constipation.

Anæsthetic Iodoform.—The following is recommended in *La Pratique Médicale* for February 14, 1888: iodoform, 1 ounce; cocaine, 15 grains; mix, and add menthol, 15 grains; essence of lavender, 20 drops.

This mixture is almost free from any bad odor, particularly if the dressing of the wound is from time to time moistened by the spirits of lavender.

Richardson (B. W.) on Methylal.[1]—In my experience of methylal as a therapeutic agent I have very often prescribed it in doses of from one to four drachms, combining it for the sake of the flavor with orange-flower syrup and adding water (proportions: methylal, ʒ j; syrup of orange, ʒ ss; water, ℥ ss). Administered in this way by the stomach it possesses hypnotic and antispasmodic properties of considerable value, and its grand service will be in the treatment of spasmodic and painful affections, such as asthma, angina pectoris, colic, and tetanus. Its readiest value will probably consist in its use as a menstruum for other substances of the same therapeutical action. I have used it in this way with nitrite of amyl in the treatment of angina pectoris—ten parts nitrite, ninety parts methylal. The vapor given off by this mixture is extremely pleasant. But it is more than pleasant; by the combination the action of the acid is less sudden and much more prolonged, a very considerable advantage. Another combination is shown of methylal with pure anhydrous ethylic ether. As the boiling point of these two fluids, their vapor densities, and their specific weights are closely allied, and as both contain the same elements, I think they will form an excellent anæsthetic compound, the solubility of their vapors in the blood being considerably greater than when ether is used alone. I have only had one experience of this mixture, but that was extremely favorable.

The following is a summary of my observations:

1. Methylal is hypnotic and antispasmodic.

2. Its action lies between ethylic alcohol and ethylic ether. It may be looked on as a volatile alcohol, and resembles closely pure methylic alcohol in action.

3. It can be administered by inhalation as vapor, by hypodermic injection, and by the mouth in aqueous solution.

4. It reduces arterial tension, and by local action excites glandular activity.

5. The sleep it induces is not profound unless the dose be excessive. It is quickly eliminated, and leaves no serious effects. It causes no vomiting or stomachic disturbance.

6. A fatal dose by inhalation kills by complete relaxation of the muscular fibres of the heart, leaving the heart distended with blood and the vascular organs intensely congested.

7. It combines with ether, alcohol, amyl nitrite, and many other remedial agents with which it acts in concert, while it equalizes their action by reason of its own solubility.

8. Its tendency is to maintain the fluidity of the blood, and it may, therefore, be of service in combination with ammonia.

9. It promises to yield a safe and effective anæsthetic mixture in combination with ether.

10. It reduces the animal temperature, but not to the same degree as common alcohol.

11. Used as an anodyne it passes out of the body without producing organic injury when not often repeated.

12. But, like all bodies of its class, it must be given in increasing quantities in order to keep up its effects, and it would soon yield evil as well as good by its habitual use in the community at large.—*Med. Press*, Nov. 2, 1887.

[1] See MEDICAL ANALECTIC, 1887, p. 103.

MISCELLANEOUS.

Springthorpe (J. W.) on Fifty Cases of Epilepsy.—(1) Regarding Sex.—Out of 50 cases, 20 are males and 30 females. Under 25 years of age in the present instance, 22 are females and 8 males.

(2) Regarding Age at Commencement.—Out of 50 cases, 1 occurred at the early age of 6 weeks; from 2 to 10, 10 occurred, or 20 per cent.; from 10 to 20, 19, or 38 per cent.; from 20 to 30, 8, or 16 per cent.; from 30 to 40, 7, or 14 per cent.; from 40 to 50, 5, or 10 per cent.; beyond that age, none.

(3) Concerning the Cause of the Attacks.—No cause could be discovered in 1 case; in 7 the family history was unknown; in 19 it was stated to be good; and in 24 there was a distinct history of nerve weakness. In 48 per cent., therefore, heredity played a prominent part. As regards exciting causes, psychical and emotional states, such as fright, anxiety, and excitement, were found present in 8 cases only—a much smaller percentage than was once supposed to hold. Constitutional causes seem responsible for 4, anæmia for 2, puberty for 4, masturbation for 2, and climacteric changes for 1 only. The comparative infrequence of the last two is an important clinical fact. Worms are responsible for 2, injury to the head by falls for 3, the febrile states for 5, the details being typhoid 1, scarlatina 2, rheumatic fever 2. Sunstroke, it is important to note, preceded in 5 cases, or 10 per cent. of the whole; pertussis, which similarly upsets the cerebral circulation, in 2; syphilis served as cause in 4 instances, and alcoholic excess in 7, or 14 per cent. It is not, of course, intended that undue importance should be attached to these few results, but it is hoped that they may be taken as suggestive, and lead to verification or correction in subsequent tables.

Coming to the characters of the attack, petit mal was found to be a marked accompaniment in 12 out of the 50 cases, an aura was perceptible in 22 cases, there was biting of the tongue in 15, and micturition in 9.

There is nothing of importance to notice regarding the frequency of the attacks or the sequelæ.

It is well, however, to notice the important part played by irritation, peripheral as well as centric. Cerebral irritation was found to exist previous to the attack in 8 of the cases. A marked ovarian irritant in 5 out of the 30—a proportion which marks the minor importance which is now attached to the influence of this function upon the production of epilepsy. In 12 cases there was distinct gastric irritation, and in 4 equally distinct intestinal irritation. The importance which attaches to the relations between the liver and the production of epileptic attacks is shown in the fact that 9 out of the 50 cases had a well-marked hepatic irritant.

The results of treatment, however, have left me still more strongly of opinion than ever that the removal of peripheral and other sources of nerve irritation is as important in the relief of epilepsy as the continued use of a specific nerve sedative, such as bromide of potassium.—*Australian Med. Jour.*, Jan. 15, 1888.

Seibert (H.) on Cholera Infantum and the Weather.—An examination of every summer month, and of every day of each month during ten years, has led him to the following conclusions:

First. Hot weather, either dry or moist, is not necessary for the epidemic appearance of acute gastro-intestinal catarrh.

Second. Warm weather, either dry or moist, showing a minimum daily temperature of not less than 60°, brings on the epidemic every year, irrespective of the maximum daily temperature.

Third. The disease loses its epidemic character as soon as the minimum daily temperature falls below 60°, as in October.

Fourth. Therefore, this disease cannot be brought about by the direct effects of high temperature upon the child's body.—*Med. News*, Feb. 25, 1888.

Wood (W. C.) on a Case of Extra Genital Chancre.—A young man in a drunken row struck a companion on the mouth, just scratching the skin. The resulting abrasion refused to heal, and developed into an indurated chancre. The person struck had mucous patches in the mouth. Specific treatment was instituted, but neglected by the dissipated patient. Eighteen months later a child of the patient died when a few weeks old, having "had a rash ever since it was born," clearly a case of hereditary syphilis. The patient refused treatment and soon died of phthisis.—*N. Y. Med. Jour.*, Feb. 18, 1888.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital.

VOL. V., NO. 10. March 8, 1888. WHOLE NO. 58.

CONTENTS.

	PAGE
Occasional Report on Laryngology	113
Leading Article	117
Miscellaneous	118

OCCASIONAL REPORT ON LARYNGOLOGY.

BY CHARLES H. KNIGHT, M.D.

Bresgen on the Origin, Importance, and Treatment of Deviations and Thickenings of the Nasal Septum.—Extreme deflections and thickenings of the septum are thought by the author to be due to traumatism. Those of moderate degree result from faulty development or hereditary vice. The latter may be treated with chromic acid cauterizations; the former require surgical interference.—*Rev. Mens. de Laryngol.*, etc., Jan., 1888.

Bond (J. W.) on Cases of Mucous Polypus in the Child.—One of these cases occurred in a child who had presented symptoms of nasal polyp from the age of eleven years. The tumor, which was very large, was removed through the anterior naris by means of Mackenzie's snare. The second patient was still younger, having had symptoms from the age of seven years. The tumor, which was found to weigh 260 grains, was removed, under chloroform, through the mouth. The author recommends tearing the polyp out by means of the wire loop, rather than cutting clear through the pedicle. In this way the liability to recurrence is thought to be lessened.—*Brit. Med. Jour.*, Dec. 10, 1887.

Cabot (A. T.) on Foreign Body in Wharton's Duct.—Poulet, in his work on "Foreign Bodies in Surgery," mentions but six cases of foreign body in Wharton's duct. In Cabot's case the foreign body was a piece of straw, which remained imbedded for six months. In the meantime efforts were made to extrude the body by pressure and manipulation. A small abscess formed, and the pain and swelling along the duct were thereby increased. Finally the patient observed that in gaping and raising the tongue, the duct being shortened, the end of the straw appeared at the orifice. It was thus possible to seize and withdraw it.—*Boston Med. and Surg. Jour.*, Dec. 22, 1887.

Bernays (Aug. C.) on Three Cases of Total Excision of the Cancerous Tongue.—The author expresses decided preference for Kocher's operation when total extirpation is required, and claims never to have lost a patient with it. The first case he narrates is of rather unusual interest, from the fact that he was obliged to abandon attempts to remove the tongue with the écraseur through an external wound and resort to the use of scissors. Frightful hemorrhage occurred, and the patient appeared to be dead. He was, however, resuscitated by tracheotomy and aspiration of the trachea, and made a good recovery.—*St. Louis Med. and Surg. Jour.*, Dec., 1887.

Hall (J. N.) on Fatal Tonsillar Hemorrhage.—Unfortunately the source of the hemorrhage was not determined by post-mortem examination, but the reporter concludes that the wall of the carotid artery had been weakened by an ulcerative process in the tonsil, and that the bleeding came from an aneurismal dilatation of that vessel. The patient, a man twenty-six years of age, seems to have had an attack of quinsy attended with severe hemorrhage from the cavity of the abscess. Several recurrences of bleeding were controlled by means of pressure and styptics. The fatal

hemorrhage occurred after an interval of eleven days, and occupied only a few minutes, so that no time was allowed for securing medical relief.—*Boston Med. and Surg. Jour.*, Dec. 22, 1887.

From anatomical considerations reviewed by Zuckerkandl, in the *Wiener med. Jahrb.*, 1887, H. 6, and referred to in the *Centralbl. für d. med. Wissensch.*, Oct. 29, 1887, it appears that the internal carotid artery, in its normal position, cannot be wounded in amygdalotomy, since that vessel is separated from the tonsil by the wall of the pharynx, more or less fatty tissue, and a layer of muscular tissue. In most cases, hemorrhage after excision of the tonsil may be controlled by pressure. In case of necessity, the proper vessel to tie is the external carotid, since only its branches are likely to be wounded.

Two cases illustrating the value of compression in hemorrhage after tonsillotomy are reported by Dr. L. E. Blair, in the *Albany Med. Annals*, Feb., 1888.

Hypertrophy of the Glandular Tissue at the Base of the Tongue.—In the *Boston Med. and Surg. Jour.*, Dr. J. W. Farlow reports several cases. He claims to have secured good results from applications of tincture of iodine and Lugol's solution in moderate degrees of hypertrophy. Larger masses require destruction with caustics, acetic or chromic acid. Vienna paste or the galvano-cautery is much more effectual. Cocaine is of service in diagnosis as well as in treatment.

In the *Med. Record*, Feb. 4, 1888, Dr. Beverley Robinson reports two cases, and expresses his belief in the extreme rarity of the condition.

Cohen (S. Solis) on Diphtheroid Throats.—The following characteristics are described: (1) almost constant pain, or at least in swallowing, usually confined to one side and often extending towards the ear of the same side, accompanied merely by slight local congestion; (2) a single patch or several irregular round or oval patches of exudation, usually on one tonsil; sometimes similar patches may be seen on the soft palate, uvula, or palatine folds, more rarely on the posterior pharyngeal wall, and exceptionally on the hard palate. The false membrane being removed, a procedure sometimes requiring a litttle force, an eroded and bleeding surface will be exposed; (3) there is but little if any glandular enlargement, although the glands at the angle of the jaw on the affected side may be very sensitive to pressure; (4) the disease is not contagious; (5) recovery is almost invariable, although extension into the air passages of children may prove fatal.—*Arch. of Pediatrics*, Feb., 1888.

Hatfield (M. P.) on the Value of Hydrogen Peroxide as a Local Application in Diphtheria.—The author has treated eighteen cases of diphtheria with this remedy, and all have recovered. He uses it in the form of spray or applies it with a swab, two ounces diluted with seven times its bulk of water. The applications were made every two hours.—*Arch. of Pediatrics*, Feb., 1888.

Duncan (J. H.) on Complete Adhesion of the Soft Palate to the Posterior Pharyngeal Wall, etc.—The author seems to have attained more than usual success in his treatment of this case, owing no doubt largely to his patient attention to after-treatmet. The wound made by the operation was, so far as possible, kept from re-uniting by the frequent introduction of blunt scissors bent at a right angle, the outer edges of the instrument being converted into cutting blades.—*The Canadian Practitioner*, Jan., 1888.

In the *Med. Record*, Jan. 14, 1888, Dr. E. H. Griffin reports a similar but more complicated case. The use of a triangular or flattened cone-shaped sound was here found of service to keep opening free.

Desvernine (C. M.) on Angioma of the Epiglottis.—The tumor was attached by a short pedicle to the laryngeal face of the epiglottis, in a man fifty-three years of age, who for two months had had occasional slight hemorrhages. At one time the patient bled to syncope. The tumor was removed under cocaine with the galvano-cautery snare.—*Revista de Ciencias Medicas.*

Cases of angiomata at the base of the tongue and at the margin of the tongue, and a third case of angioma growing from between the two right upper incisors, were presented by Mr. Treves at a recent meeting of the London Pathological Soc.—*Brit. Med. Jour.*, Jan. 7, 1888.

Dr. W. C. Phillips has reported a case of angioma of the tonsil in the *N. Y. Med. Record*, March 12, 1887.

Baron (Barclay J.) on a Case of Extremely Acute Œdematous Laryngitis.—The rapid development of the condition in this case is remarkable; only three

hours elapsed between the first symptom of throat trouble and the extreme limit of the œdema. The larynx seems to have become involved by direct extension of simple pharyngeal irritation occurring in an individual somewhat debilitated. In such cases scarification is considered the only proper treatment. The writer was deterred from resorting to this measure by fear of suffocation from liberating the thick exudation in the epiglottis, and chose instead to get more tardy relief by means of hot cataplasms and steam inhalations of compound tincture of benzoin. Thus the suffering and danger of the patient were prolonged for many hours, whereas instantaneous relief might have been given.—*Brit. Med. Jour.*, Dec. 17, 1887.

Ferreri on Catheterism of the Larynx in Syphilitic Stenosis.—In *Lo Sperimentale*, June, 1887, twenty-five cases of laryngeal stenosis from syphilis are reported. Schrötter's tubes have been found satisfactory. In every case of stenosis the use of laryngeal catheters, with the aid of the laryngoscope, and under cocainization of the pharynx, should be tried before resorting to tracheotomy or laryngotomy. No reference is made to the tubes of O'Dwyer.—*Rev. Mensuelle de Laryngol.*, etc., No. 12, Dec., 1887.

Smolarski on Syphilitic Stenosis of the Larynx.—Two cases are reported in children; one five, the other seven years of age. Tracheotomy was done for dyspnœa threatening suffocation, the larynx being blocked by papillary growths. Other symptoms of syphilis were present, and cure finally resulted from specific treatment.—*Vierteljhr. f. Derm. und Syph.*, 1887, H. ii.

Cohen (J. Solis) on Treatment of Intralaryngeal Abscess from Necrosing Cartilage.—The author advocates splitting the larynx, removing all diseased and dead structures, providing drainage, and securing asepticism. Precautionary tracheotomy may be required. This method of proceeding is much more judicious than to temporize. Impairment of voice, which may follow so radical an operation, is a secondary matter. It is better to perform it early than be obliged to do a hurried tracheotomy as a last resort, and, after all, perhaps lose the patient from septic poisoning—*Med. News*, Dec. 24, 1888.

Moure, (E. J.) on Vocal Troubles in Acute Catarrhal Laryngitis.—1. Marked alteration of the voice in acute catarrhal laryngitis results more often from muscular troubles than from structural changes in the mucous membrane.

2. The muscles more often affected are the thyro-arytenoid and the transverse arytenoid.

3. Roughness of the voice, cough, and aphonia are produced, especially by paresis or paralysis of the transverse arytenoid.—*Rev. Mens. de Laryngol.*, etc., No. 10, Oct., 1887.

Ingalls (E. F.) on Rheumatic Laryngitis.—Five cases are reported in apparent support of the theory that there exists a form of laryngitis characterized by pain or aching in the laryngeal region without commensurate laryngoscopic signs, except in some cases of paresis. The lesion is considered distinct from neuralgia and paræsthesia, and is due to the same causes as muscular and articular rheumatism. The best results may therefore be expected from antirheumatic treatment.—*Am. Jour. Med. Sci.*, Jan., 1888.

Langmaid (S. W.) on Successful Removal of a Pin from the Larynx Two Years after It had been Swallowed.—The interesting points in this case are the size of the pin (a bank-note pin), the length of time it remained embedded, the position in which it was finally discovered, and its skilful removal. It was found piercing the left ventricular band, its point being directed obliquely upwards and backwards over the right arytenoid towards the posterior wall of the pharynx. It was removed with Mackenzie's large laryngeal forceps, considerable force being required.—*N. Y. Med. Jour.*, Dec. 24, 1887.

Todd (Chas. A.) on Removal from the Larynx of a Tumor of Twenty-five Years' Growth.—Several unsuccessful attempts were made to remove the tumor at the time of its first appearance. It finally caused such dyspnœa that an attempt was made to remove it with the cold-wire snare under cocaine. This also failed, on account of breaking of the wire. It was then removed piecemeal with forceps, several weeks being occupied in clearing the larynx. There does not appear to have been a microscopical examination of the tumor, but it is supposed to have been a papilloma. The absence of this and of other details rob the report of much of its value.—*St. Louis. Cour. Med.*, Jan., 1888.

Lucas (R.) on Syphilitic Gumma of the Trachea.—The case reported is of some interest because of the rarity of such a lesion in this region. The tumor occupied the anterior wall of the trachea, and was plainly visible with the laryngoscope. It seems to have resulted from syphilitic infection about eleven years previous, the patient in the meantime having been quite exempt from symptoms. Resolution slowly progressed under iodide of potash carried to doses of twenty grains three times a day.—*Brit. Med. Jour.*, Dec. 24, 1887.

Stoerck on Method of Preventing the Formation of Granulations after Tracheotomy.—In laryngeal diphtheria the highest degree of inflammation exists, and the most damage is sustained in the region below the vocal bands, and after elimination of false membrane an intense catarrhal condition persists. This condition is favorable to the formation of granulations, which are to be found here rather than in the immediate neighborhood of a tracheotomy wound. Dyspnœa results from mechanical obstruction caused by these formations, as well as from abolition of laryngeal reflex action (Gerhardt), and from paresis of muscles. The granulations are treated by curetting, cauterization, and the use of dilating canules. Stoerck rejects Bonchut's catheterization and the tubage of O'Dwyer. He prefers tracheotomy to laryngotomy or cricotomy. The operation is preceded by two injections in the tracheal region of 10-per-cent. solution of cocaine, and the wound is bathed, during the operation, with the same solution. In this way the operation becomes bloodless as well as painless.—*Wiener. Med. Wochenschr.*, Nos. 1–3, 1887. *Rev. Mens. de Laryngol.*, etc., No. 12, Dec., 1887.

Beehag (A. J.) on Menthol in Laryngeal and Pulmonary Phthisis, and in Other Diseases.—This article is an enthusiastic recommendation of Rosenberg's menthol treatment. It is claimed that under it the sputa become looser, the cough diminishes, and the disease is retarded. Two or three injections, of about fifteen minims each, are made with a specially constructed laryngeal syringe, directly into the affected region, once or twice daily, for about two months. The strength of the solution is twenty per cent. of menthol in olive oil, which dissolves twenty-five per cent. of menthol when heated above 55° F. Thus very concentrated solutions may be used if warmed. Also hourly inhalations of the same solution, five minims to a pint of steaming water, are used; or a few drops on cotton may be frequently inhaled. At first there is slight burning pain, soon followed by anæsthesia, which condition lasts longer with each succeeding injection, so that, at the end of a week, the anæsthetic effect lasts a whole day. The dysphagia is thus relieved, the patient is able to eat, and marked improvement in the general condition follows. Where there is marked swelling and infiltration, the lactic-acid treatment of Krause, after the use of Hering's curette, seems to work better. The latter method, however, is more painful, and its application must be more limited. The author also uses a powder of menthol 3 ss., ammon. chlorid. 3 iss., and pulv. acid. boric 3 i. in laryngeal phthisis where there is much secretion. In ozæna and in chronic rhinitis this powder is useful. The olive-oil solution is a good application in acute pharyngitis and tonsillitis. In chronic pharyngitis, with hyperæsthesia or paræsthesia, menthol may be with advantage added to Mandl's iodine formula. In otalgia and in middle-ear disease, associated with inflammation of the naso-pharynx, menthol acts beneficially.—*Edinburgh Med. Jour.*, Jan., 1888.

In an article on tuberculosis of the nose, mouth, and pharynx, in the *Buffalo Med. and Surg. Jour.*, Feb., 1888, Dr. F. H. Potter speaks favorably of the action of menthol in laryngeal and pulmonary tuberculosis.

Barlow (Thos.) on Acute Enlargement of the Thyroid in a Child.—At a meeting of the London Clinical Society Dr. Barlow read notes of a case, which was that of a boy, aged three, previously healthy, and just recovering from a slight attack of erythema nodosum. The day after he had been taken out-of-doors he had a little nasal catarrh, and complained of pain in the neck. A slight enlargement of the thyroid gland was found. The whole gland was involved, but the left lobe more than the other parts. The enlargement increased and gave rise to much pain and considerable dysphagia, and was attended with pyrexia as high as 103°. The acute phase lasted four days, and the total duration of the enlargement was about a fortnight. Great relief was obtained by the application of a single leech over the

centre of the swelling. After the subsidence of the fever there was very great anæmia and some tendency to collapse, but the boy made a complete recovery to health after three weeks' stay at the seaside. A summary of the literature of the subject was given in regard to acute enlargement of the gland as distinguished from goître strictly so called. Besides the idiopathic, traumatic, and metastatic forms described by Lucke, reference was made to the epidemic variety recorded in connection with French garrisons, and to thyroiditis occurring as a complication or sequel of acute and subacute rheumatism, and also of ague. The present case, from the fact that it succeeded upon erythema nodosum, might be considered to belong to the rheumatic variety, but no other rheumatic phenomenon was observed, and its severity was greater than that of the recorded rheumatic cases, the duration of which, in their acute phase, was not longer than forty-eight hours. On the whole, it seemed best to place the present case provisionally in Lucke's idiopathic group, and to accentuate its association with slight nasal catarrh, and sequence on exposure to cold when in an anæmic condition.—*London Lancet*, Dec. 17, 1887.

LEADING ARTICLE.

A Case of Symmetrical Gangrene and Scleroderma Due to Endarteritis of the Terminal Arteries.—In the *Gazette Médicale de Strasbourg* of Feb. 1, 1888, Dr. D. Goldschmidt records a case which is of great interest from a pathological point of view. The patient was a woman 45 years of age. Her disease commenced by attacks of itching, followed by swelling, first of the right, then of the left hand. On the soles of the feet blebs would appear, the feet being usually cold and moist. The condition of the flesh did not change, but the fingers became affected by attacks of local asphyxia, and later by small elevations and gangrenous spots, forming a typical example of Raynaud's disease. Meanwhile the integument of the face became bronzed, then harsh and tense, the bronze color finally giving way to a waxy tint spotted with red. The chin, lips, nose, and eyelids retained a certain amount of mobility, but the features became rigid. The mucosa of the mouth and pharynx became infiltrated without rigidity; the roughness of the voice showed that the larynx was also affected. Her head came to be bent forward, and movements of her limbs difficult. These latter phenomena were not due to change in the skin, but to changes in the muscles and tendons, which could be felt to be hard, and in certain localities would give rise, on contraction, to a creaking sound like new leather. The fingers became flexed, and would no longer be completely closed, owing to induration and loss of elasticity of the skin. Sensibility in the fingers was diminished but not destroyed. The patient lost strength and appetite. The legs became œdematous, the urine albuminous. The right ventricle became hypertrophied. She finally died of heart failure about five years from the commencement of her malady. There was no appreciable cause for the patient's disease; syphilis, alcoholism, intermittent fever, lead poisoning, ergotism, and hysteria were all excluded. No treatment had had any appreciable effect.

The autopsy, made by Recklinghausen, presented the following important features: The brain and cord were not examined. The large arteries, venous trunks of the neck and extremities, and the sympathetic ganglia were normal. The subcutaneous tissue and peri-muscular fasciæ of the neck were very dense. The tendons of the forearm were in places torn and split, the same being true of the sheaths. Portions of skin were taken from the right arm, thorax, popliteal space (where the skin was indurated), and plantar surface of a toe. Extensive thickenings of the internal coat, both of the terminal arteries and veins, was observed even in some places where the skin was apparently normal. Similar changes were found in the terminal arteries of the lungs and kidneys. Infarcts found in the kidneys appeared to be due to thrombosis of diseased vessels. Small lymphomata were found along the affected vessels. No changes whatever were found in the nerves or ganglia. The cardiac hypertrophy and subsequent failure appeared to be due to the extensive obstruction in the pulmonary arteries.

The atrophy and sclerosis of the skin observed in the popliteal space, the atrophy of the subcutaneous cellular tissue, fasciæ, tendons, muscles in their peripheral portions, on the one hand, and the diffuse thickenings of the fasciæ, and perimysium

in the neck and thorax, were phenomena which advanced with the endarteritis of the small vessels, and ought, consequently, to be considered as being its effect.

Goldschmidt quotes also in brief two cases of P. Meyer's (*Gaz. Méd. de Strasbourg*, 1888, Nos. 11 and 12) resembling the above clinically, in which a similar extensive obliterating endarteritis was found, together with some degenerative changes in peripheral nerves. In Goldschmidt's own case the skin, and consequently the terminal nerves, of the hands were not examined.

The conclusions that he comes to are:

1. That in the case reported there were not two morbid conditions but one and the same malady; that, consequently, his observation supports directly the opinion that ranges Raynaud's disease and sclerodema under the same heading.

2. That the primary and dominant lesion was obliterating endarteritis, which was found in the external integuments, the lungs, the kidneys, and in other places where it had given rise to varied and grave pathological conditions, among them being the cardiac affection which was the immediate cause of death.

3. That the alteration of the small vessels was produced by a cause as yet undetermined, possibly nervous, but which the future may prove to have been of microbic origin (this latter idea being suggested by the discovery of a microbe in lepra).

In the cases published by Pitres and Veillard of symmetrical gangrene, in which a lesion of the peripheral nerves was regarded as the cause of the gangrene, the vascular system was assumed to be normal from microscopic examination of the arteries. There is no mention of a microscopic examination of the skin. The same is true of the case reported by Hochenegg.[1] The case cited above seems to throw doubt on the cases of the latter writer, and to make necessary in future a careful study of the *terminal* arteries, in the affected parts, before lesions of the nervous system can be assumed to be directly responsible for symmetrical gangrene. The occurrence of gangrene, as a result of endarteritis of the terminal arteries in syphilis, is a recognized affection.[2] It has not, as far as the writer knows, been previously recognized in a case presenting typically the group of symptoms known as Raynaud's disease. In this case syphilis was excluded.

R. VAN SANTVOORD, M.D.

[1] See a review of the subject of symmetrical gangrene by the writer in MEDICAL ANALECTIC, Jan. 12, 1888, p. 17.

[2] **Klotz, (H.) on the occurrence of ulcers resulting from spontaneous gangrene of the skin, during the later stages of syphilis, and their relation to syphilis.**—They are apt to be roundish and punched-out, with thickened, abrupt edges involving the entire thickness of the skin, with uneven floor, and a dark-green color.

The author concludes: 1. That ulcers resembling the so-called gummatous syphilitic ulcer may occasionally result from circumscribed spontaneous gangrene of the skin, without the formation of a previous syphilitic neoplasm.

2. That such ulcers may be distinguished by several peculiarities of formation of floor and shape.

3. That they are but little affected, if at all, by antisyphilitic treatment.

4. That spontaneous gangrene in such cases is probably due to endarteritis obliterans.—*Med. Record*, Sept. 10, 1887.

MISCELLANEOUS.

Savage (G. C.) on Exhaustion and Inflation Treatment of Middle Ear Troubles.—In December, 1886, I set forth this principle in the *Nashville Journal of Medicine and Surgery*. Reference was there made exclusively to treatment of recent cases of suppurative inflammation of the middle ear, attended by a discharge of pus through an opening in the drum membrane. I have since used it slightly modified in other forms of inflammation of the Eustachian canal and middle ear.

The following is the plan: By Politzerization, or inflation according to Valsalva (which I now prefer), all pus is blown out into the external auditory canal. After the pus has been removed from here by some cotton and a probe, a warm solution of silver nitrate (gr. ss to i to ℥ i) is put in the external auditory canal, half filling it. Now ask the patient to expire fully, then close his mouth and nose and make an attempt at inspiration. According to the success of this manœuvre, sometimes plainly perceived by both patient and physician, the medicine is drawn into the middle ear. After a minute Valsalva's inflation or Politzerization is practised, followed by use of probe and cotton, and the medicine removed just as the pus was. In five minutes the operation is repeated. It is well to go through this process from three to five times at the same

sitting. Patients are always directed to inspire and expire, as trying to draw and expel the breath through the nose. Expulsion must always be the final step in the use of this method.—*Med. Register*, Dec. 10, 1887. A. T. MUZZY, M.D.

Sherard (S. G.) on a Case of Syncope Following Injections of Water into the Ear.—A lady of forty-five had complained for over a year of a constant roaring in both ears and rapidly increasing deafness. She was not hysterical. A watch held three feet from the right ear could be heard; held five inches from the left ear, could be heard very indistinctly.

The drum membrane and external auditory canal of the right ear appeared to be normal; the drum membrane of the left ear and external auditory canal were hyperæmic and covered by a muco-purulent discharge. Perforation of drum membrane was not observed. On examining the pharynx, posterior nares, etc., they were found to be in a normal condition, with no history of ever having been inflamed. I gave injections of hot water into the left ear. The benefit was so marked that I decided to try this remedy several times. On applying water the third time, the patient complained of dizziness, which soon passed away.

The next application was followed by the following alarming symptoms: the patient fell into a profound syncope, which appeared likely to prove fatal. Free use of stimulants, at the end of one hour and twenty minutes, revived her, but only to be followed by severe dyspnœa, which lasted about two hours. I was compelled to administer chloroform during this latter attack, as it was the only remedy that would control the symptoms. From actions of patient, I would say the obstruction to breathing was located in the larynx. She would constantly clutch her throat as if making an effort to remove some foreign body.

Auscultation over the lungs gave no sign of any thing wrong, but at the larynx there was a whistling sound, as if it was tensely constricted.—*The Post-Graduate*, Jan., 1888.

Bennett (F. W.) on the Instillation of Nitrate of Silver into the Ear.—Mr. F. consulted me in January, 1887. The right ear was the seat of acute inflammation, which rapidly recovered. The left ear was the seat of perforation of two years' duration. The posterior inferior segment had disappeared together with about half of the long process of the malleus. The membrane of the tympanic cavity was swollen and granular in appearance. I advised the use of solutions of zinc sulphate. Under this local treatment the hearing steadily improved, but the discharge did not stop. After trying other methods of treatment, I dropped into the ear a few drops of a warm twenty-per-cent. solution of nitrate of silver. Immediately there was intense pain. I lost no time in syringing the ear, but without relieving the pain. The patient suffered extremely for three days, in spite of instillations of cocaine, the insertion of ear cones of gelatine containing morphia, and the hypodermic injection of morphia on the second night. On the third day there was absolute deafness, even when the tuning-fork was applied to the skull. The patient complained also of frequent transient attacks of giddiness. In consequence, I advised the use of leeches to the ear, and prescribed a mixture containing iodide of potassium. The pain now ceased, but for several days the hearing was almost *nil*, and the discharge continued as before. Two months later the patient consulted me again, and under the use of powdered alum the discharge rapidly stopped, the hearing improved considerably, the hearing distance for the watch becoming $\frac{11}{60}$ in.—*Lancet*, Feb. 4, 1888.

Hotz (F. C.) on Lead Lotions in Diseases of the Eye and Ear.—In October a small piece of gravel struck the right eye of a middle-aged farmer; and, after several days, as the eye did not get over the effect of this injury, but remained red and sore, he called on his physician, who gave him an eye-water containing sugar of lead. Under the use of this lotion the eye became rapidly worse, more inflamed, more painful, and its sight greatly obscured. After two weeks he came to the city, and I found the eye intensely inflamed, the whole cornea hazy, and almost the whole nasal half occupied by an irregular, uniformly white patch of a thick deposit of lead. Under cocaine these incrustations were removed; but it was several days before the corneal tissue was entirely clear, and it took four weeks for the eye to recover from the extensive ulceration and violent inflammation.

It is obvious the use of the lead lotion in this case intensified the traumatic inflam-

mation, and prolonged the suffering and disability of the patient; the sediment of white lead acted like a foreign body on the cornea, causing extensive ulceration of its surface layers.

If lead lotions are to be used at all in the eye, they should be applied to the conjunctiva of the eyelids only and washed off again with water; in this way we can safely avoid incrustations in the cornea. I formerly used solutions of lead sugar quite extensively for follicular conjunctivitis and never noticed the slightest trace of a lead stain on the cornea, though often there was an ulcer or an abrasion of epithelium of the cornea. But I observed, in spite of the thorough washing I gave the conjunctiva after each application, that soon the conjunctival papillæ became distinctly white; this white color could not be wiped off. The very small amount of lead which during each application had entered between and under the epithelial layers and could not be washed out had gradually accumulated to a visible, white deposit.

Sugar of lead is a very unstable article; it exchanges its acetic acid for carbonic acid wherever it can find the latter. And if we drop a solution of lead sugar into an ear affected by catarrhal inflammation, with a perforation of a drumhead, the mucous secretion quickly precipitates carbonate of lead, which, being absolutely insoluble in water, and very heavy, is not easily removed by syringing, and is apt to fill the fine recesses of the tympanic cavity. But it is obvious the presence of this foreign substance upon so sensitive a tissue as the mucous membrane of the middle ear must become a source of serious irritation and continuous trouble.

The ill-effects of such deposits in the tympanic cavity are shown in the following observation:

In October, 1884, I treated a gentleman for subacute catarrhal inflammation of the right ear; there was a small old perforation in the inferior segment of the drumhead and a slight discharge of mucus. The treatment with boracic acid relieved him in five days and he had no trouble with this ear until last March, when a cold developed another attack of catarrhal inflammation of the same ear. He consulted his family physician, who prescribed a lead lotion to be dropped into the ear; but, instead of relief, the patient found his ear grew rapidly worse, becoming very painful and almost entirely deaf. When I examined the ear I found no discharge; the drumhead very red and bulging; the old perforation stopped up with a whitish cement, which had to be dug out with instruments, and consisted principally of white lead. A large quantity of the same substance was found in the tympanic cavity, preventing the catarrhal secretion from escaping through the perforation in the drumhead. As soon as all this putty was removed, the pain in the ear ceased, and the inflammation readily subsided under the treatment with boracic acid.

It is singular that physicians seem to have such preference for sugar of lead, when there are other astringents which are just as efficient and have not the disagreeable property of the lead. We can very well get along without sugar of lead, and it would be a good plan to abolish it forever from the list of medicines used for lotions in the eye and ear.—*So.-West. Med. Gaz.*, Jan., 1888.

Van Millingen on Toxic Amblyopia.—During fifteen years' experience in Turkey and the Levant, the author had not met with a single instance of alcoholic or tobacco amblyopia in a Turk, male or female. As regarded the tobacco, this could not be attributed to the kind smoked, for Turkish men and women used such a large quantity that the amount of nicotine would correspond with the amount in the smaller quantity of stronger tobacco used in this country. He therefore attributed the exemption to the mode of smoking, and believed that poisonous symptoms resulted from the juice of the tobacco being allowed to come in contact with the mucous membrane of the mouth in a moist state. Turkish women did not drink at all; some of the men drank *raki* to excess, but he had never known an instance of alcoholic amblyopia from this cause. On the other hand, he had met with eight instances of alcoholic and two of tobacco amblyopia in foreigners resident in Turkey.—*Lancet*, Feb. 4, 1888.

Campbell (F. W.) on Pityriasis Versicolor.—The great object of all treatment should be to cast off the upper layers of the skin in which the "microsporon" has its seat, and for this purpose I know nothing superior to a lotion of ℥ ss. to ℥ i. of hyposulphite of soda to O i. of water. This lotion should be freely applied to the spots, by means of a fine sponge, several

times daily. Yesterday I had at the outdoor clinic a woman, who on the 3d of this month presented herself to me with well-marked pityriasis versicolor, principally on the chest and shoulders, and for whom I prescribed this lotion. Its effect was every thing that could be desired, and on her return yesterday she was practically cured. Frictions by green soap, with a copious bath daily, will at times be found useful. Ointment of chrysarobin ten to twenty per cent., pyrogallic acid five to ten per cent., salicylic acid of like strength, and thymol of five per cent. are all useful, but my experience is decidedly in favor of the lotion of the hyposulphite of soda.—*Canada Med. Record*, Dec., 1887.

Leonard (R. W.) on Eczema.—In a very obstinate case of eczema the author ordered the following formula :

℞	Sodæ bibor.		ʒ ij.
	Acid. salicylic.		ʒ ij.
	Acid. boracic.		ʒ ss.
	Glycerinæ.		
	Alcohol.	ää	℥ j.

M. Sig.—Apply t. i. d.

After the fifth application of the above formula, her hands were very much relieved, and inside of two weeks her hands were perfectly well. She always keeps a bottle of this lotion on hand, and if she imagines there is the slightest appearance of the eczema the lotion is applied.

A young woman employed in a millinery establishment had been under treatment without any satisfactory result. She thought that perhaps the coloring matter in the ribbons had poisoned her. She could only use a needle about two hours, when it became so rusty she had to throw it away. She was thinking of leaving the business and going into something else. The formula as given above was ordered without any internal treatment, and in about one week her hands were perfectly well. She is still in the millinery business, and her hands have remained well ever since, now some fifteen months.—*Medical Summary*, Feb., 1888.

Victims of the Recent Blizzards in the Northwest Asphyxiated before Freezing.—There is an amount of evidence and a combination of circumstances sufficient to show that the greater number of the several hundreds who lost their lives in the recent great "blizzard" of the Northwest perished from asphyxia and not by freezing. Many of the bodies, when found, were in the position of grasping or clutching at their own necks or throats. In-door witnesses describe the atmosphere as having an appearance of density and darkness, similar to that stated by divers as existing when submerged with their armor in deep water. Many that escaped describe their peril as being from loss of breath or suffocation.

The terrific hurricane force of the wind, loaded with falling snow—the latter being by a fall of temperature whose degree and suddenness has no recorded parallel converted into dry crystals and then, by the gale, ground to a fine dry ice-dust—these conditions produced a state of the atmosphere as unfit for respiration, and aëration of the blood as is water for warm-blooded animal life. The extent of the fatality resulting from this storm, also its horrors, will never be fully known. For reasons evident and natural the papers of the region effectually suppress and underrate the actual truth. Your correspondent, while just outside the belt of the storm's fatality, is sufficiently contiguous to obtain information and facts in verification of the views given.—H. C. Markham, M.D., in letter to *Jour. Am. Med. Ass'n*, Feb. 18, 1888.

Putnam (J. J.) on a Case of Peri-Pancreatic Hemorrhage which Proved Fatal in Four Days.—The patient was a middle-aged man who had suffered for five years from a severe form of hemiplegia. His final symptoms consisted in severe epigastric pain, varying in intensity, but not easily controlled by remedies, associated with epigastric tenderness, nausea and vomiting, excessive pallor with a bluish tinge, feebleness of the pulse, and eventually cardiac paralysis. For eight hours or more before his death the patient had been almost pulseless, breathing very rapidly, and excessively cold, but consciousness had remained unimpaired up to a few minutes before the final termination.—*Bost. Med. and Surg. Jour.*, Feb. 23, 1888.

Silcock (A. Q.) on Strangulated Cæcal Hernia in a Child; Radical Cure by Twisting the Neck of the Sac.—A male infant, aged fifteen months, was brought to the children's department of St. Mary's Hospital, on May 4, 1887, having a large right scrotal hernia. The child had suffered from sickness during the day previous to admission, and had passed

no motion since May 2d. The rupture had been noticed since birth, but the mother stated that it had become much larger on May 3d. The hernia was irreducible when the child was placed under the influence of chloroform, and therefore herniotomy was decided upon. The strangulated portion of gut was found to consist of the cæcum with vermiform appendix, contained in a perfectly distinct sac, at the fundus of which was the testicle. The vermiform appendix lay somewhat posteriorly to the exposed portion of the cæcum, and could not be seen until the relations of the parts were disturbed in order that the protruding intestine might be thoroughly examined. The gut involved was moderately congested, and much difficulty was encountered in reducing it, even after the external ring had been notched with the knife, a difficulty which was no doubt incidental to the large size of the hernia; and although carefully manipulated, the coats of the cæcum were bruised, and its peritoneal covering, which completely surrounded it, was lacerated during reduction.

With a view to producing a radical cure, the sac was dissected up from its attachments, divided circumferentially above the testis, and its neck twisted by the fingers, a catgut ligature being tied tightly around the twisted pedicle just inside the external ring; the sac was then cut away immediately below the ligature.

The whole operation was carried out antiseptically, but convalescence was retarded by an attack of orchitis and suppuration in that portion of the sac which lay around the testis—circumstances attributable to the failure of the antiseptic precautions after the third or fourth day.

When seen on December 28th, the scrotum and testis were perfectly normal, and there was no evidence of any tendency to hernia on the right side. On the left side a congenital scrotal hernia existed, but this was considerably smaller than it was when the child was first seen. A double inguinal truss had been worn since the wound had healed.—*Brit. Med. Jour.*, Feb. 11, 1888.

Solomon (J. O.) on Poisonous Symptoms Arising from Eating the Green Rind of the Horse Chestnut.—The patient, a well grown and usually healthy boy, of between three and four years of age, had been eating the green rind of the fruit of a horse-chestnut tree, some of which, happily in the interest of diagnosis and treatment, he had vomited. The child sat on his mother's knee, resting his back against her chest, indicating the absence of muscular prostration. The pupils were widely dilated in bright light, the motor muscles of the eyeball and the levator palpebræ were normal in their action, the face was flushed, the pulse full. The little patient was drowsy, and apparently slept, which was interrupted at short intervals by sudden awakings and screams, attended by what appeared to be great terror as from a dreadful dream, or as if some terrible object was bodily present when he opened his eyes. Questioning failed to elicit from the child the cause of his terror (delirium). On the following morning all the symptoms had subsided, the sole treatment having been an emetic.—*Brit. Med. Jour.*, Nov. 19, 1887.

Toxic Effects from Small Doses of Potassium Chlorate.—Dr. A. F. Fuchs of Fredonia, Wis., writes to the *N. Y. Medical Record*, January 28, 1888: "A robust male adult, aged forty-eight, was ordered to use a saturated solution (1 in 20) of chlorate of potassium as a gargle for diphtheria. He was directed to take a very small swallow, three times in twenty-four hours, directly from the bottle, in addition to gargling every two hours. After taking the fourth dose, the urine was noticed to be dark red, and a messenger came to inform me. The chlorate was discontinued, and in thirty-six hours the urine was of ordinary appearance.

"Macroscopically the urine presented every appearance of a hemorrhage from the kidneys, but it was much darker than in any case of hæmaturia I have seen. Analysis showed the presence of blood. There can be no doubt that the chlorate was the cause. No other drug was given immediately before or after, or conjointly with it. Three doses of calomel had been given, the last one six hours before beginning the chlorate. The patient affirmed positively that he had not taken more than a teaspoonful at a dose, but allowing four times that quantity, we would have forty-eight grains producing toxic symptoms."

Gunn (J. W.) on Poisoning by Tansy Oil; Recovery.[1]—I was called at 1.30 A.M. to see a married woman who, on returning home from a dance, had

[1] See MEDICAL ANALECTIC, 1887, p. 489.

swallowed, with suicidal intent, three or four drachms of oil of tansy. She had procured a half-ounce vial the day before, and taken two doses of eight drops each to bring on her menses. Her husband saw her drain the bottle, and hurried her to the office of Dr. Huntsman. She complained of blindness, vertigo, and stupor. The doctor gave her large quantities of mustard and water, ipecac, and two grains of tartar emetic. No emesis following, he sent for me.

I found her insensible and rather pale; surface and extremities warm; breathing noisy and hurried; pulse 80 and feeble, and imperceptible during convulsions; pupils somewhat dilated; recurring clonic spasms, followed by rigidity. Rattling sounds on respiration. I gave her one sixth grain apomorphia, which was allowed to run down her throat, as my hypodermic syringe was out of order.

I then procured a stomach syphon, introduced it into the stomach, poured in water, but on lowering the end it became occluded with tough mucus; tried it repeatedly, but unsuccessfully. The lower jaw was partially luxated by the spasms, and remained so unless reduced. The odor of the breath was distinctive of tansy.

Pharynx and fauces were so insensible that introduction of the finger produced no efforts at vomiting, and for a time coughing was not excited when fluids entered the larynx. Becoming discouraged at our inability to produce vomiting, though I repeated the apomorphia, we began giving spoonful doses of whiskey in water, repeating every minute or two. After using four or five ounces, reflex action of the fauces returned and copious vomiting occurred. Vomited matter consisted of whiskey and water, slimy mucus, tinged with blood, strongly impregnated with oil of tansy. Bloody foam had covered the lips during spasms. This vomiting occurred fully two hours after the poison was taken. Continued whiskey till consciousness returned, which was at 9 A.M. She then urinated about twelve ounces of very turbid urine, having the odor of tansy. Pulse at this time 110. Recovered completely in two days, except loss of memory for two or three days succeeding the attempt.

There was no repeated diuresis as the books state, and she recovered from a large dose which had a good chance for absorption, as the stomach was empty and more or less dry, from a night spent in dancing. I saw the empty bottle afterwards, and know from the druggist that it had been filled. Death appeared so certain that the recovery was not predicted nor expected. In looking up a number of works on materia medica and toxicology, I find no treatment outlined further than "on general principles." In another case I should follow the emetic with a large dose of castor oil. I forget to state that one fourth grain morphia was injected beneath the skin.—*Medical Bulletin*, Jan., 1888.

Lowndes (F. A.) on Venereal Diseases in Girls of Tender Age.—Of all the cases in which medical evidence is required, few, if any, are less inviting than those in which men are charged with criminal assaults on females of tender age. The responsibility is very great; for any remissness on his part to state every circumstance which may be favorable to the accused on the one hand, or to strengthen the case for the people, on the other, may be productive of the most serious consequences. In the former case it may lead to the conviction of a man who is perfectly innocent of the crime with which he is charged, and his sentence to penal servitude for a considerable portion of his future life; while in the latter case it may assist in the acquittal of a guilty man—guilty of as vile an offence as a man can be guilty of. The very first female patient admitted under my care in the Lock Hospital was a diminutive girl whose age was stated to be twelve years, who looked even younger, but who was really just over thirteen. Since then other cases of infected children have been brought to the hospital, making, up to the present date, a total of twelve cases. In all these cases there was some evidence of infection with gonorrhœa or syphilis, and in at least three of them it was clearly proved that the accused persons who were suffering from a similar disease hoped to effect a cure by having sexual intercourse with their victims. This horrible superstition still prevails largely in Lancashire, as in other parts of England; and as it must from the very first have proved to be as false as it is filthy, it is lamentable to observe how long it has prevailed. Of the 12 cases the ages were as follows: 1 was five and a half, 1 seven, 2 nine, 2 eleven,

3 twelve, 1 thirteen, 1 fourteen, and 1 fourteen and a half years old.

There remains to be noticed a very important matter upon which much difference of opinion still exists. I refer to the right of a medical practitioner to examine an accused person at the request of a magistrate or police officer. I have never done this without the permission of the person charged given in the presence of at least one witness. Moreover, I have always, in addition to obtaining his consent, fully explained that the result might be in his favor or against him, but that whatever it might be I was bound to state it. If after this full explanation he consents, I have no hesitation in examining him.

While the experience of all the foregoing cases shows how little reliance could be placed upon the statements of at least some of these girls, it is perfectly clear that what is now considered a misdemeanor was committed upon all of them, while in nine cases they were under the age of thirteen, which makes it a felony under the existing law. I fear that there are many other cases (where fortunately for the females there has been no infection with disease) which do not come to light.—*Lancet*, Jan. 22, 1887.

Effects Following the Rapid Emptying of a Distended Bladder.—F. H——, aged twenty-three years, well built, perfectly healthy, left Liverpool, by the 12:45 night train for Edinburgh. An hour before starting he had eaten a hearty supper, with which he drank a pint of beer. During the journey he lay down reading and smoking, and fell fast asleep half an hour before reaching Carlisle. When the train stopped at Carlisle (at 4:15 A.M), he awoke suddenly and hurried to the urinal, which happened to be exactly opposite the compartment in which he was travelling. After micturating freely, he in a few seconds felt slightly sick, and then, becoming "quite blind" and insensible, fell backwards full length. He was set on his feet by his fellow-passengers, and, though slightly dazed, feeling as if his head were "ice cold," and staggering, he walked back to the train. Ten minutes later he could scarcely realize that any thing extraordinary had happened. With the exception of soreness about his elbows, head, and buttocks, which (owing to the heaviness of his fall) lasted two or three days, he experienced no further inconvenience. As he had never fainted or had a fit of any kind in his life before, he was naturally somewhat puzzled, if not alarmed. There can be no doubt that this was a case of fainting due to rapid emptying of a somewhat distended bladder. (I omitted to mention that he had not passed urine for four hours.)—Letter to *Lancet*, Feb. 18, 1888.

The William F. Jenks Memorial Prize.—The first triennial prize, of two hundred and fifty dollars, under the deed of trust of Mrs. William F. Jenks, will be awarded to the author of the best essay on "The Diagnosis and Treatment of Extra-Uterine Pregnancy." The conditions annexed by the founder of this prize are, that the "prize or award must always be for some subject connected with Obstetrics, or the Diseases of Women, or the Diseases of Children"; and that "the Trustees, under this deed for the time being, can in their discretion publish the successful essay, or any paper written upon any subject for which they may offer a reward, provided the income in their hands may in their judgment be sufficient for the purpose, and the essay or paper be considered by them worthy of publication. If published, the distribution of said essay shall be entirely under the control of said Trustees. In case they do not publish said essay or paper, it shall be the property of the College of Physicians of Philadelphia."

The prize is open for competition to the whole world, but the essay must be the production of a single person.

The essay, which must be written in the English language, or if in foreign language, accompanied by an English translation, should be sent to the College of Physicians of Philadelphia, Pennsylvania, U. S. A., addressed to Ellwood Wilson, M.D., Chairman of the William F. Jenks Prize Committee, before January 1, 1889.

Each essay must be distinguished by a motto, and accompanied by a sealed envelope bearing the same motto and containing the name and address of the writer. No envelope will be opened except that which accompanies the successful essay.

The Committee will return the unsuccessful essays if reclaimed by their respective writers, or their agents, within one year.

The Committee reserves the right to make no award if no essay submitted is considered worthy of the prize.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital.

VOL. V., NO. 11. March 15, 1888. WHOLE NO. 59.

CONTENTS.

	PAGE
Leading Article	125
Therapeutics	128
Occasional Report on Orthopædic Surgery	131
Miscellaneous	132

LEADING ARTICLE.

Hip-Joint Disease.—Dr. T. L. Stedman[1] calls attention to the peculiarity of the limping. In commencing joint disease, or in hyperæmia of the articular structures before any actual inflammation is present, there is often a limp or "favoring" of the member, which is unaccompanied by pain, and is due to reflex influences or to nature's effort to protect the joint. The limp in this case is similar in character to that caused by painful affections, but is wholly involuntary, and the patient himself is often unable to explain why he walks lame. In anchylosis of the hip in extension, the limp is characterized by a peculiar balancing of the body in an antero-posterior direction. As the weight rests on the sound side the anchylosed limb is thrown forward and the body backward, and then, as the weight is transferred to the anchylosed limb, the body goes on in advance while the leg on this side remains behind. Sometimes the limp consists in a sort of rotation, now to one side and now to the other, as the axis of one limb is transferred from one limb to the other. The body is turned half around on the sound limb, and then the motion is reversed by rotation on the heel of the anchylosed side. When one hip is stiffened in flexion, the vertical position of the body is maintained by compensatory lordosis of the lumbar spine, but the limb is shortened by reason of its position, and there is an exaggeration of the vertical and also of the lateral oscillations.

Dr. A. G. Gerster,[2] in a clinical lecture, presented a patient who had a pale, anæmic integument, covering a good supply of flabby fat. The mucous membranes were pale; there was a slight amount of blepharitis; the nostrils were a little reddened. She never had a sore throat; nevertheless, the cervical, submaxillary, and posterior cervical glands were intumescent. Five days before she had fallen on the floor, since which time she had limped. There was absence of flexion in the high region of the pelvis; difference in the size of the nates was also absent. There was little impediment to motion, except to abduction during flexion; then the pelvis followed the limb most distinctly; in rotation also the pelvis followed to some extent. On trying the most important test, that is, flexion, and at the same time abduction or rotation outward, the pelvis followed. The question whether the thigh is permanently flexed is determined by placing the patient flat upon her back and attempting to press the limb down upon the table in the position of extension. The thigh being flexed upon the pelvis, any attempt to bring it in line with the table will raise the pelvis, leaving a space between it and the table, through which one is able to thrust his hand. That is the case in this instance.

The author did not believe that the symptoms justified the assumption of the presence of hip-joint disease; but that, unless good care was taken of the child, hip-joint disease might develop.

In a discussion on the treatment of tubercular affections of the joints, at the

[1] *Med. Record*, January 28, 1888.

[2] *Med. and Surg. Reporter*, December 3, 1887.

New York State Medical Society, Dr. Gerster[1] said: The cases were divided into those in adults and those in children. In the former mechanical treatment was unsatisfactory; excision of the diseased parts was called for. In children, good results usually attended the wearing of an apparatus. If abscess formed, puncture was preferable to incision. When children were operated upon, the surgeon should bear in mind the danger of causing arrest of growth in the limb. To prevent subsequent troublesome hemorrhage he did not render the limb bloodless by the Esmarch bandage, but elevated the limb, and then applied two or three turns of the elastic constrictor. The after-treatment would depend upon whether motion was or was not desired. When motion was to be preserved, passive motion should not be made so long as much swelling and pain persisted.

The difficulty of accurately locating the lesion in commencing hip disease has always been very great, therefore any new facts bearing on the subject are to be prized. Dr. Roberts[2] reported a pathological specimen showing a superficial erosion of the articular surfaces of the hip-joint. Upon section of the specimen, there was no internal disease recognizable by the naked eye. This fact, considered in conjunction with the additional fact that during life there was no atrophy or reflex spasm of the thigh muscles, rendered the specimen instructive as illustrating the possibility of differentiating the diseases that affect the hip joint. If, as in this instance, the case be one of suppurative synovitis of the hip joint, persisting until the entire articular surfaces are eroded, there will be no reflex spasm nor muscular atrophy so long as the interior of the bone remains unaffected. On the other hand, if the case be one of true hip-joint disease, where the central part of the head of the thigh bone is primarily affected, marked muscular atrophy and reflex muscular spasm are always present.

Mr. Robert Jones, of Liverpool, who probably understands the use of the Thomas' hip-splint better than any one else, excepting Mr. Thomas himself, calls attention[3] to some points that are usually overlooked. The splint is composed of wrought iron, which must be sufficiently malleable to admit of being moulded into shape by suitable wrenches, and sufficiently unyielding to prevent any modification in shape by movements, voluntary or accidental, on the part of the patient. Most surgeons give their instrument-makers instructions to make the splint light and narrow, apparently unconscious of the fact that the bed and not the patient has to bear the weight.

A careful description, illustrated by twelve wood-cuts, is given, and attention is specially called to the fact that the buttock bend should be *in situ* midway between the sacrum and the trochanter major; and that the body portion of the stem requires in every case a twist as it lies to one side of the spine against the barrel-shaped chest.

To prevent children from walking about when left alone, a "nurse" is added. This is merely a wrought-iron bar, affixed by screws to the extremity of the hip-splint, and prevents any attempt at placing the leg on the floor.

In another place[4] Mr. Jones has recorded upwards of twenty patients who have recovered from serious joint lesions by prolonged rest. Six of the cases were hip disease, in five of which motion resulted, four of them bearing marks of two or more sinuses. In one patient of twenty-five, seventeen sinuses had communicated with the hip, and one with the pelvis. In five of the twenty cases albuminuria for many months had existed, and the patients had tided over the disease. There were seven cases of motion in the knee joint after prolonged suppuration. A splint which had kept one hip confined for four years was removed for the first time in the presence of the meeting, and free motion resulted. He dwelt largely upon the precautions to be taken in the mechanical treatment of diseased articulations, and the necessity for prolonged rest. Amongst the practices condemned, Mr. Jones placed passive motions, circular compression, and extension. The latter was especially injurious, and was in direct conflict with the treatment by rest.

Permanent *adduction* is a deformity much to be feared in the treatment of hip-joint disease, with the long traction-splint.[5] On this subject Dr. H. L. Taylor says[6]: Per-

[1] *N. Y. Med. Jour.*, February 18, 1888.
[2] *The Post-Graduate*, January, 1888.
[3] *Brit. Med. Jour.*, Oct. 1, 1887.
[4] *Med. Press and Circ.*, Feb. 8, 1888.
[5] THE ANALECTIC, 1887, p. 463.
[6] *N. Y. Med. Jour.*, Nov. 19, 1887.

sistent adduction in the late stages, or after the cure of the disease, whether from neglect of proper mechanical treatment in the beginning, from subluxation of the head of the femur due to erosions, or from other causes, is very common and very serious as regards the patient's comfort and power of easy locomotion, and often very inpracticable. To overcome such deformities Dr. C. Fayette Taylor devised the apparatus described.

This apparatus consists in the shank and side-plate of the long hip splint, ending above in properly shaped spreading bars carrying a perineal strap adjusted to the groin opposite to the adducted thigh. The apparatus is applied to the inside of the adducted limb, and fastened by a strap and buckles to adhesive plasters attached to the leg, as in case of hip disease.

During the convalescence from hip-joint disease, some form of the Dow's splint, as devised by Dr. C. F. Taylor, is found very serviceable. Writing on this subject Dr. E. G. Brackett [1] says: When the perineal band is used to support the entire weight of the body, the parts are subjected to so much pressure, and especially, of course, with heavy subjects, that the ordinary round part is frequently a source of continual discomfort, from concentration of too much pressure over so small an area. The same is true with less pressure, but unusually tender skin. For use in these cases, I devised a perineal band, the plan of which was to utilize all bony surface possible for support. The parts available for support are the tuberosity and ramus of the ischium, and a portion of the ramus of the pubis. The tuberosity is, of course, both in position and structure best calculated for the work, but the ramus is also capable of considerable use. The object of the pad was to get a bearing surface as large as the bony structures would allow, and with a means to adapt this pressure as uniformly as possible to this uneven portion of the pelvis, and to change the amount in different portions of the pad. To accomplish this, three straps pass beneath the perineum, and are firmly secured posteriorly to a steel bar, and anteriorly to three buckles, thus allowing their length to be changed. The posterior bar is connected by a strap at its centre to the posterior arm of the brace, thus allowing either end a certain amount of vertical oscillation. The three buckles are fastened to a similar bar, which has two straps to connect it with the anterior arm, little or no motion being allowed. Between these straps and the perineum is a piece of leather, its size regulating that of the pad, which is fastened to the bar behind. This serves to transmit the pressure of the straps, and also to keep them in position, which is accomplished by button-hole slits, through which the straps pass. The position of the straps is as follows: The outer one passes along the outer border, and is secured to the outer buckle. It passes beneath the tuberosity of the ischium. The second, or middle one posteriorly, crosses obliquely inward to the inner buckle, and by this, more nearly corresponds to the direction of the ramus, to which it gives support. The third, or inner, crosses the one just described, and is secured to the middle buckle, and gives its special support in the space formed by the divergence of the first and second. By this crossing the inner edge of the pad is made concave, giving better adaptation to the parts. By this arrangement of buckles, the surface can be made to fit closely, all the parts serving for support. Felting one eighth of an inch in thickness may be used to cover the leather. More than this should not be used, as it interferes with the principle of the pad.

The author then goes on to show by a series of instantaneous photographs, and pressure-tracings at heel and toe, both normal and while wearing apparatus, the theory upon which the Dow's splint gives protection and support to the joint; and a record of four cases is given illustrating the clinical results.

In this country the hip joint seems to be much less frequently subjected to operative procedures than formerly, in spite of the advantages of antiseptic treatment, and much less frequently than is still seen in England. Mr. J. K. Barton [2] advises a crucial incision over the trochanter, the use of a small trephine, and a Volkman's scoop, applied so as to remove the soft cancellous structure, more or less passing into suppuration, and the use of a drainage tube for a long time. The operation gives immediate relief, and the results are very gratifying, and permanent also if the

[1] *Boston Med. and Surg. Jour.*, Oct. 6, 1887.

[2] *Lond. Lancet*, Aug. 13, 1887.

drainage be kept up for at least two or three months, and the cavity of the bone occasionally washed out.

Mr. F. Churchill,[1] of London, defends excision of the joint. As to the most suitable stage for excising the joint successfully, the author would wait until there was distinct evidence of disorganization of the joint, but would not wait until the rough end of the femur could be made to grate in the acetabulum, nor until the buttock was riddled with sinuses, nor until there was considerable fatty and waxy degeneration of liver and spleen from protracted suppuration.

Among the poor, where proper care can not be had at home, excision is advised at once. Where it is possible, however, a prolonged sojourn at the seaside is advised. The child should have a horse-hair mattress made just about the size of the body, and supported upon a basket-work trestle with handles, so that the patient can be transported from place to place or from bed to perambulator without moving the body. The thorax can be strapped to the bed and a weight and pulley properly adjusted to the leg so as to keep up extension, and special care should be taken to avoid eversion of the foot. He should have plenty of good nourishing food, and be kept, during the prevalence of fine weather, as much as possible out in the open air, but carefully protected from the direct rays of the sun. Similar precautions will be required during the protracted period of convalescence after hip excision. The operation should be as complete as possible. Not only must all the sequestra be removed, but the granulation tissue and the remnants of capsule, etc., should be scraped, and the wound carefully irrigated with perchloride solution, iodine water, or chloride of zinc solution.

A new method for treating tubercular diseases of the joints has been brought forward by Kolischer (*Wiener Medizinische Presse*, No. 22, 1887).[2] To obtain calcification of the tuberculous products, and to excite an inflammation which would be substitutive to the tubercular process, a solution is thrown at several points into the fungoid mass by means of a hard-rubber syringe armed with a platinum needle, and then a dressing of gauze impregnated with a solution is applied.

The solution for injection is made as follows: 75 grains of the neutral phosphate of calcium are dissolved in 12 drachms of water, and phosphoric acid is added slowly until a perfect solution is obtained; to this are added 9 minims of dilute phosphoric acid (Austrian Pharmacopœia) and water enough to make 3 ounces. Then sterilize by boiling. The second solution, for impregnating the gauze dressings, is prepared like the first, but contains 90 or 180 instead of 9 minims of dilute phosphoric acid.

There is some fever and severe pain for a few hours. The inflammatory reaction lasts from four to seven days, and the induration of the parts from two to four weeks. Where there is caseation the skin breaks, and there is considerable discharge for a time, but the opening gradually closes if the calcium-phosphate is continued, and a firm cicatrix forms.

JOHN RIDLON, M.D.

[1] *Archives of Pediatrics*, Sept., 1887.

THERAPEUTICS.

On Forced Respiration in Opium Poisoning.—In THE MEDICAL ANALECTIC for December, 1887, p. 536, Dr. Fell's first case was reported pretty fully, with an explanation of his method of treatment. In a recent communication[3] he states that four lives have now been saved by this process. Of these cases, three have occurred in his practice and one in the care of Länger of Vienna.

Dr. Fell's second case was a man, aged 43, who took, about 10 P. M., two ounces of laudanum and some chloral, all of which was retained. Various measures, including all varieties of artificial respiration, were employed until 3.40 the next morning when, respiratory and heart failure both appearing imminent, tracheotomy was performed and forced respirations were begun. Immediate improvement of the pulse ensued, and in a little over two hours the patient regained consciousness. Some digitalis and atropia were given from time to time. Until 6.15 P. M. forced respiration had to be continually kept up, as when it was stopped not the slightest voluntary or reflex respiratory act could be noticed. At that time the patient began breathing for himself, but at the end of fifty-five minutes the

[2] Editorial, *Med. Record*, Aug. 6, 1887.

[3] *Buffalo Med. and Surg. Jour.*, March, 1888.

respirations had fallen to eight per minute, and the patient requested that forced respirations be resumed.

For over fourteen hours, the patient could not be left to breathe for himself, even for a half-minute, without evident discomfort and danger, viz., between 4.00 A. M., 10th inst., and 6.30 P. M., 10th inst., and for nearly seven hours thereafter the *natural* had to be supplemented by the *forced respirations.*

Every six or eight hours catheter used. Up to 12.30 A. M., 11th inst., nearly twenty-four hours after the patient was first discovered, not more than six ounces of urine had been drawn from the patient. The left arm was partially paralyzed, the brain congested.

Between 3.00 and 4.00 A. M., 11th inst., bowels moved for the first time. At 7.00 A. M., the patient left the table, without assistance, to use stool. At 9.00 A. M., the tracheotomy tube was removed, wound plugged antiseptically, and patient put to bed.

Although very seriously ill for three or four days following, no serious lung difficult set in and the patient has fully recovered.

Bearing somewhat upon this method of treating opium poisoning is a case recently reported[1] by Dr. J. F. Groenevelt, of New Orleans. A man of 60, after a prolonged spree, took an unknown quantity of laudanum. He was brought to the hospital at 8 P. M. February 12, 1888, profoundly narcotized. No effect followed the subcutaneous administration of 1-10 gr. of apomorphia. The man was pumped out and ten ounces of black coffee were introduced into his stomach. Atropia was freely given, 1-10 gr. being given in four hours. Faradism was employed, one pole being applied over the cervical region of the cord and the other over the chest. In spite of all these endeavors the breathing was very unsatisfactory and it was found that good results followed blowing forcibly through a gum catheter introduced into the trachea. This did not appear to expand the chest, but it seemed to distend the glottis and also act reflexly, even at a time when all other reflexes were absent. The pulse, however, failed, and hypodermics of digitalis were commenced, 3 iiss of the tincture being given in divided doses. At 2.00 A. M. some of the reflexes returned, and at 4.30 A. M. he became conscious.

[1] *New Orleans Med. and Surg. Jour.*, March, 1888.

Stewart (J. S.) on the Clinical Value of Homatropine Hydrobromate in Ophthalmology.—From a careful perusal of current literature the author concludes that single instillations of less than the one fifteenth of a grain of hydrobromate of homatropine are of no value for the correct estimation of ametropia.

On account of the quick return of the ciliary power and normal size of the pupil after single instillations of the one fortieth of a grain, or less, of hydrobromate of homatropine, this drug is extremely useful in cases where an accurate ophthalmoscopic examination of the media and fundus of the eye is desired.

As a single instillation of an absolutely neutral salt does not act as an irritant, the drug may be thus employed for purposes of precision, even in cases where local irritation exists.

On account of the constant local irritant action of repeated instillations of hydrobromate of homatropine, this drug may be considered harmful in certain cases of inflammatory disease, or traumatic lesion of the ocular coverings and tunics.

The fact of the constant irritant action of repeated instillations of homatropine hydrobromate on the deeper tunics of the eye, the choroid, and probably to a certain extent the retina, gives answer in great measure why ametropia cannot be properly estimated; hence the drug should be avoided in the correction of refractive error.—*Medical News*, March 3, 1888.

Hargis (R. B. S.) on the Topical Application of Oil of Turpentine to Recent Wounds.—The writer has for many years applied the oil of turpentine in almost every case of external injury involving a solution of continuity of hard as well as of soft parts, with the effect of preventing suppuration and sepsis, and hastening the process of repair. For example, a recently maimed hand or foot is presented, in which certain tissues, integuments, muscles, nerves, bones, etc., are involved to an extent a little short of necessitating amputation. After the removal of all foreign bodies, fragments of bone and necrosed tissues and other parts likely to die, effusions of blood are stopped and every visible clot is cleared away, and after free lavation with hot water (101° F.), the parts, made as dry as possible by a clean, soft sponge, are

properly adjusted and covered with pledgets of lint or absorbent cotton saturated with oil of turpentine. Adhesive plaster may now be useful or necessary, and a careful application of a muslin roller bandage completes the first dressing.

A compound of two parts of oil of turpentine and one of linseed oil thoroughly mixed is now applied over the site of the wound to repletion, and reapplied at certain intervals, so as to keep it constantly saturated. By this manner of dressing, the wound will remain free from indications of putrefaction for an indefinite time. Union by first intention is the rule. Animal ligatures cut off close to the knot should be used, and the lips of wounds approximated by adhesive strips.—*Medical News*, March 3, 1888.

Purdy (C. W.) on the Use of Saccharin in Diabetes.—This agent is absolutely innocuous to the system, even when administered in sufficient quantity to equal in sweetening power three pounds of sugar a day, and continued indefinitely. The fact that large contracts have recently been made for the supply of saccharin for military use, both by the German and the Russian governments, indicates clearly its harmlessness as a flavoring agent for food and drink.

With an agent so harmless, and possessing a sweetening power more than three hundred times that of sugar, we naturally turn to diabetes as a useful field for its employment, since the deprivation of sugar—always so essential in successfully treating these cases—is often one of the severest trials to the patient in the enforcement of the diabetic dietary. Simply as a flavoring agent saccharin leaves little to be desired as a substitute for sugar, save its sparing solubility. It is of course entirely devoid of nutritious properties.

It is evident that in this product we possess a flavoring agent for food and drink the palatability of which is quite equal to that of the finer grades of sugar, and which may be used by diabetic patients with the greatest impunity.

Through its antiseptic properties it retards the abnormal fermentative changes in the stomach so common in diabetic patients—thus promoting digestion and relieving flatulence.

As yét we are without sufficient practical data to judge of its blood effects in large doses to diabetic patients, yet both chemistry and physiology would indicate its use for the purpose of favorably influencing some of the more fatal complications of the disease.—*Jour. Am. Med. Asso.*, Feb. 25, 1888.

Newth (A. H.) on the Treatment of Hydrophobia by Hyposulphites.—Nearly thirty years ago Professor Polli of Milan suggested the use of sulphurous acid in cases of icorrhæmia. He proved by experiment that dogs who had putrid blood injected into their veins quickly died. But if hyposulphite of sodium was previously mixed with the blood, they were not affected. Further, if the hyposulphite was administered to the dogs either before or immediately after the injection of putrid blood, they did not suffer.

I have used this remedy repeatedly in cases of blood-poisoning with most marked success. For instance, a patient has received a punctured wound which has inflamed, the lymphatics have become swollen and reddened, the parts are extremely painful, and there are rigors. Within a short time after the exhibition of the hyposulphites the pain has decreased, the parts are less inflamed, and all the symptoms of poisoning have abated.

I find even children take hyposulphites readily, and I have never met with the slightest unpleasant symptoms from their use. Probably this may in some measure be due to the fact that I am in the habit of prescribing the hyposulphites in combination with bicarbonate of soda and sulphate of magnesia in peppermint water. For children I simply give it with syrup and caraway-water. I would suggest a fair trial of this remedy, not only when hydrophobia has developed itself, but as a prophylactic. After a bite by a mad dog I would give five or ten grains of the hyposulphite of sodium or magnesium (the latter is richer in sulphurous acid) for the first three or four days every four hours; then three times a day for a week; then twice a day for another week; then every morning early for one month; recommending a Turkish bath twice a week. When the disease has developed I would prescribe the hyposulphite every hour or every two hours, with vapor or dry hot-air baths, or prolonged warm-water baths containing some hyposulphite in solution. The hypodermic injection might also be tried, especially if the patient is unable to swallow.—*Lancet*, Feb. 18, 1888.

OCCASIONAL REPORT ON ORTHOPÆDIC SURGERY.

BY JOHN RIDLON, M.D.

Douglas (J. G. D.) on Bullet Wound of Spine; Paralysis; Secondary Abscess; Death.—A gentleman aged forty-four years received a shot from a revolver at a distance of five or six yards. The ball entered at the level of the tenth dorsal vertebra, a little to the left of the mesial line of the spine. By operation the track of the bullet was followed downwards to the first lumbar vertebra, and it appeared to pass between the transverse processes of the twelfth dorsal and first lumbar vertebræ. One of these transverse processes was removed, but the bullet could not be found. The symptoms were: pain in the back, numbness, and inability to move the legs freely. There was impairment of sensation, especially in the calves of the legs and the dorsum of the feet. There was retention of urine and obstinate constipation. Four days after the injury the right leg could be moved over the left, but not the left over the right. Tactile sensation normal in right foot and leg, but impaired in left, and absent from dorsum of foot. The temperature remained slightly elevated, and after four weeks there was an occasional rigor, and bed-sores began to appear over trochanter and sacrum. The patient died on the one hundred and seventeenth day after the injury.

The necropsy showed a large, diffuse abscess extending from the base of the left kidney, permeating the left psoas and passing into the internal iliac muscle; numerous small multiple abscesses in both kidneys; part of the left iliac bone found bare. The bullet was found completely embedded in the twelfth dorsal vertebra. Its situation seemed to be anterior to the transverse process. The cord appeared to be pressed upon, though not penetrated by the foreign body. To the naked eye there was no apparent change in the appearance of the cord or its membranes.—*Lancet*, August 6, 1887.

De Garmo (W. B.) on the Mechanical Treatment of Spinal Irritation.—Of the cases reported, six were females, two were males; six were practically cured, one benefited, and one received no benefit. The appliance used consists of a pelvic spring arching over the crest of the ilium, which forms the base of support. From the top of the arch of this spring a steel side-post runs to each axilla, and there supports a crutch-piece or shoulder-bow which passes across the back. In the back, running from the pelvic spring to the shoulder-bow, is a flexible steel spring which carries the spinal saddles or supports. Any number of saddles may be added that is deemed advisable. This instrument has only one fastening, that being in front of the pelvic spring, and the chest and abdomen are left entirely free from any compression. In this we have what is practically a splint for the spine. It is somewhat flexible, but gives sufficient support without restraining the ordinary use of the muscles. It belongs to the old system of Banning supports.—*Med. Record*, December 24, 1887.

Gibney (V. P.) on the Management of Abscesses in Connection with the Bone Diseases of Children.—The question of prime importance is this: not whether the abscess should be opened or left alone, but how the abscess should be managed. In my opinion it matters little whether the surgeon chooses to open the abscess with a knife, or whether he chooses to aspirate, or whether he chooses to leave it entirely alone. He can take any plan he likes; but if he fails to protect the bone or the joint with suitable support he will get about the one result, and that is: the abscess will be followed by others, and the sinuses will close only to reopen.—*Arch. of Pediatrics*, November, 1887.

Roberts (M. J.) on Fundamental Anatomico-Mechanical Considerations Underlying the Successful Treatment of Deformities, Diseases, and Weaknesses of the Spine.—In osteitis, or caries of the vertebral bodies, the establishment and consummation of reparative processes depend upon the material lessening and final arrest of irritation at the seat of disease. The sources of such irritation are:

1st. That which is caused under pressure at the inflammatory focus from superimposed bodily weight.

2d. That which results from jars, or vibratory impulses, due to the impact of the feet against the ground in walking, and which are imparted to and conducted along the bony framework to the seat of disease.

3d. Jars which result from riding in

vehicles of any kind, and which are transmitted along the bony framework to the seat of disease.

4th. Direct blows or concussions, resulting from falls.

In all inflammatory lesions of bone we have the formation of new or embryonic cells. If the irritation at the seat of disease be excessive, these cells will break down and form waste products. If, however, the irritation be not too great, they become developed into bone tissue.

Linear traction on the spine is the most efficacious method known of reducing all forms of lateral curvature. Such traction can only be applied with full efficacy through gymnastic exercises. The tendency of all supports, if worn constantly, is to lessen the powers of the spinal muscles, and especially is this the case in true rotary lateral curvature, The distinctive features of the treatment, whether for deformities, diseases, or weaknesses of the spine, is that a plaster cast is first taken of the patient's body when in partial suspension ; this is corrected by the cutting down of prominences and the filling up of depressions, and directly over this model the corset is constructed or woven out of wire in the form of thread. The wire used may be heavy or light, fine or coarse, soft or hard, according as it is necessary to meet the requirements for support, resiliency, wearing, twisting, etc. It may be made out of any metal or alloy of metal. For some time I have been constructing all my corsets out of the incorrodible alloy, phosphor-bronze ; this may be plated or covered with silk, cotton, or other fabric.

The therapeutic advantages of this corset are, that it affords more efficient and constant support than any other form of apparatus ; that it is resilient, and therefore not irksome to the wearer ; that it is extremely cleanly, not absorbing the perspiration ; that it affords perfect ventilation to the body ; that it permits easy and unrestricted respiratory movements ; that it is durable, elegant, and thoroughly adapted to the varying contours of the body and exigencies of the individual examples of diseases, deformities, and weaknesses of the spine. It possesses, in addition, the superior qualities of extreme lightness, compared with many of the corsets or spinal supports now in use. Furthermore, the discharges from the body, when brought in contact with it, do not weaken or render it foul by their absorption, as is the case with the plaster-of-Paris jacket, felt jacket, and supports made of similar materials. It does not absorb and become fouled by the perspiration.—*Med. Register*, Sept. 17 and 24, 1887.

MISCELLANEOUS.

Zoöplastic Grafts.—Surgeons are familiar with skin-grafting in the human subject, but it is rather a novel procedure to substitute the skin of birds and poultry for snips from the patient's own healthy skin. Wiesmann twice transplanted skin from pigeon to pigeon with success, and three times from fowl to fowl. Under the title of *Dermepenthesis*, Mr. G. F. Cadogan-Masterman published some interesting cases a few weeks since in our columns, in which he had succeeded in utilizing the skin of young wild rabbits for the purpose of bringing about the cicatrization of raw and ulcerating surfaces. Several others have repeated and varied Wiesmann's experiments, but before Mr. Masterman none of them seem to have been enterprising enough to spare their patients the disagreeable snipping incidental to the operation as it is usually practised. At about the same time Dr. Redard communicated to the Paris Academy of Medicine some observations of his own with animal grafts on wounds in human beings. In a case of severe burn of the scalp of eight months' standing, in a child two years of age, he obtained a rapid cicatrization by means of grafts from a fowl. He first tried grafts of frog's skin, but as these proved to be repulsive to patients, and did not give very good results, he substituted others from the fowl, and the wound, which measured three inches by two and a half, had completely healed in two months. He had been equally successful in other and subsequent cases. He takes the skin from beneath the wing of a chicken, carefully securing the subjacent cellular tissue, but avoiding adipose tissue. The transplanted pieces varied from a sixth to a third of an inch in size, and they were maintained in position by means of a little cotton-wool and iodoform gauze. The skin of birds and fowls has the advantage of being supple, delicate, and vascular ; it adapts itself readily to the surface of the wound, and adheres without undergoing absorption.—*Brit. Med. Jour.*, Feb. 18, 1888.

Jessop on Intestinal Obstruction from an Ileo-Cæcal Growth.—G. J., aged thirty-three, signalman, was admitted into the Leeds General Infirmary on November 22, 1887. Nine weeks previously there was a gradual onset of abdominal pain, and at the end of twenty-four days he was seized with symptoms of complete obstruction, the vomiting becoming stercoraceous. This lasted for seventeen days, when diarrhœa supervened, and there had been no vomiting for eight days before admission, at which time he was very ill and wasted, the abdomen much distended with constant borborygme and visible peristalsis. On December 1st the abdomen was opened by the usual median incision, and a hard, fixed, irregular mass was at once felt at the junction of the ileum and cæcum. The colon was collapsed. An incision was made a few inches above the obstruction, and an artificial anus was established, the whole of the small intestines having been passed twice through the fingers in order to empty them and facilitate their reduction within the abdominal cavity. The patient made a good recovery, and was discharged on January 21, 1888.—*Brit. Med. Jour.*, Feb. 18, 1888.

Case of Foreign Bodies in the Intestine.—In the January number of the *Revue Médico-Pharmaceutique*, Constantinople, appears the following case, presenting points of practical interest:

In November, 1887, a man came to consult Dr. Siotis on account of pain in the epigastrium, due to the singular fact of his having swallowed, as he judged, about fifteen Turkish gold coins. The day after the accident he took a strong dose of castor oil, which purged well, but failed to bring away any of the coins. Two more purgative doses only weakened him, and increased his pain so much that he consulted Dr. Siotis, The patient looked about thirty years of age, had no fever, and no loss of appetite. Percussion over the abdomen elicited at the left hypochondrium an unmistakable metallic sound as of pieces of money in contact. With the stethoscope the rattle of the coins on movement was very distinct. The doctor ordered rest and this pill: Extract of opium, gr. 1½; extract of belladonna, gr. ½; 10 pil.; one every hour. Next day he found in the fæces three coins, but at the same time a tumor presented itself in the rectum and caused great pain. The exploring finger found, in the rectal pouch, a cylindrical tumor formed by a fold of intestine, hard, and containing some of the pieces. Neither manipulation nor enemata succeeded in emptying this pouch, and Dr. Siotis returned to the pills. On the following day four coins were evacuated, and the tumor vanished, while pain was now felt in the right iliac fossa. Percussion here brought out a clear metallic ring. The order was now: Croton oil, 2 drops; castor oil, 2½ drachms; syrup, 1½ ounces. Active purgation followed this dose, but not one coin passed, and the pain increased, so the opium and belladonna pills were resumed. Next day two pieces were passed. The metallic sound was gone, but still pain remained. The patient was advised to continue the pills, and was not again seen by Dr. Siotis for twenty days, when he met him casually, and was informed that the rest of the pieces had passed, and that he was perfectly well.—*Lancet*, Feb. 18, 1888.

Hyde (J. W.) on the Uses and Dangers of Ergot in Obstetrics.—According to the author ergot, administered prior to delivery, produces a frightful mortality among the infants. It is liable to produce rupture of the uterus, as well as of other maternal soft parts. It is improper treatment, in lingering labors, with inertia uteri, as the forceps are far safer to both mother and child.

Ergot is a more frequent cause of the retention of the placenta than all other causes. It adds much needless distress to already exhausted mothers, by the prolonged after-pains. The retained placenta is frequently the cause of other disasters, the manual or instrumental interference necessary to dislodge it often producing traumatism or sepsis, or both; and from these there may arise perimetritis, suppression of the lochia, suppression of the milk, and even puerperal insanity and embolism as indirect sequences. The same argument may apply to the retention of clots.

Ergot is a very potent factor in the production of subinvolution and displacements.

Ergot, according to the author, is never necessary. If there is no more than the usual moderate hemorrhage which ordinarily accompanies a delivery, the uterus will take care of itself. If there should be a sudden and alarming hemorrhage, the patient is already suffering from shock, therefore the use of ergot by the stomach

would be useless; and if it was not immediately rejected, it would not be absorbed.

The hot-water intra-uterine douche is efficient and preferable for controlling the hemorrhage.

In dangerous cases of post-partum hemorrhage, the hypodermic injections of ergot may be used, as this would be of value as against the negative results of ergot by the stomach. Ergot has been condemned and abandoned by many of the largest maternities in Europe and this country.—*Brooklyn Med. Jour.*, Feb., 1888.

Crooke (G. F.) on a Case of Pulmonary Endarteritis.—The patient had complained of shortness of breath, pains in the left side and back, pain and fulness in the abdomen, and swelling of the legs. At the necropsy there were found stenosis of the mitral valve, probably congenital, hypertrophy of the left auricle, great hypertrophy of the right ventricle, and dilatation of the pulmonary artery. The smaller branches of the latter vessel showed great thickening of the intima, which was roughened and nodose, and was undergoing fatty changes. The smallest twigs showed marked obliterative endarteritis, and contained small adherent thrombi. There was no systemic atheroma.—*Lancet*, Feb. 25, 1888.

Edson (B.) on Sixteen Cases of Poisoning by the Castor-Oil Bean.—In October, 1887, fifteen children under six years of age, and one female nurse twenty years old, all inmates of the Home for Destitute Children in this city, indulged in a repast of raw beans taken from a castor-oil plant growing in the yard of the institution. The effect upon them all was to cause severe vomiting and prostration. The vomiting was persistent and seemed but little amenable to treatment. Various measures were tried to afford relief, but none was satisfactory. The nausea and retching recurred at short intervals in many of the cases, for at least forty-eight hours after the seeds were eaten, varying in duration and severity with the number eaten, the amount of food contained in the stomach at the time, and the susceptibility of the individual children.

The number of beans eaten could not be well ascertained, but it is believed that no child ate more than three or four.

The nurse, who even yet maintains that she ate but a single one, was so affected that for over sixty hours she could not assume the upright position without the recurrence of the nausea and vomiting. She was so prostrated that she was under treatment in the hospital of the institution for ten days before she was able to resume her work. Extreme prostration was a feature of all these cases.

The remarkable feature in *all* these cases was, that *in not a single instance was there any catharsis.* This is not in accordance with what we have been led to expect.

I am not prepared to deny, in general, the cathartic action of castor-oil beans when eaten; but certain it is that there was no such action in these cases.

I can offer no suggestion respecting treatment, further than the indefinite one, to treat "on general principles."—*Brooklyn Med. Jour.*, Feb., 1888.

Thomson (W.) on Suicide with a Pin.—The deceased was admitted to the Richmond Hospital, but was found to be dead. He had been arrested as a lunatic running about the street in his shirt. On examination of the body, the head of a pin was discovered in the fifth intercostal space, two and a half inches from the nipple—downwards and outwards. The pin had traversed the pericardium, and wounded the anterior wall of the left ventricle. The pericardium contained seventeen and a half ounces of blood fluid, and there was a small rent in the wall a quarter of an inch in diameter, which was filled by blood clot. The surface of the ventricle in contact with the pin was torn to the extent of nearly an inch; a small vein was also wounded; all the internal organs were congested; the urine was albuminous.

In discussing this case, Dr. Foot said the case of Admiral Villeneuve, who commanded the French fleet at Trafalgar, was a remarkable one of suicide by a pin driven into the heart. It appeared that he found out the region of the heart by means of anatomical plates; and when he was found dead a long needle was discovered sticking into his heart. A case came under his (Dr. Foot's) notice of a child into whose heart a needle went from its mother's dress as she was clasping it to her breast. He distinctly saw the oscillation of the needle caused by the action of the heart, and drew it out with a rotatory motion, in order to lessen the chance of hemorrhage. The woman brought the child to him next day, but nothing further happened.

Dr. Foy mentioned a case of a nobleman

of Turin—a courtier of King Amadeus—who was killed while asleep by his wife, who drove a golden needle into his chest at a spot ascertained from anatomical plates to be over the heart. Fischer collected 453 cases of wounds of this sort, in the majority of which death resulted from the pericardium becoming filled with blood. Dr. Moxon, at the Clinical Society of London, some time since mentioned a most remarkable case of a medical student, who, while on the spree, passed some pins into his heart. His pericardium was opened, and the head of a pin was found outside the wall of the right ventricle. It was grasped, and a slight incision made in the ventricle to facilitate its removal; but the systolic action of the heart carried it in, and the pin was still in the young man's ventricle, and occasioned him no trouble. —*Med. Press*, Feb. 15, 1888.

Another Test for Sugar.—Mr. Marson recommends sulphate of iron and caustic potash as a test for the presence of sugar in urine. One and a half grains of the pure salt is dissolved in about 120 minims of urine by the aid of warmth, then add five grains of caustic potash and boil. If sugar be present a dark green precipitate will form, the superjacent liquid being reddish-brown or black, according to the amount of sugar. If no sugar be present the precipitate is greenish-brown in color, and the liquid is colorless.—*Med. Press*, Feb. 15, 1888.

Chenoweith (C.) on a Rare Case of Hernia.—The patient was a man who seemed to have an apparently strangulated hernia. On examination I found an old oblique hernia which had so frequently escaped as to be nearly direct. After a few ineffectual attempts at reduction, I put the patient under the influence of chloroform, to a slight degree, and made another attempt at reduction, but failed as before. The rings were large, and there was not any apparent obstruction sufficient to prevent the return of the bowel. We now gave a dose of morphine, and waited for an hour or more, and as the hernia was still irreducible, we urged the use of the knife. Having put him profoundly under the influence of the chloroform, we opened the sac, but there was no stricture or other obstruction apparent, nor was there any discoloration of the intestine; but, on taking hold of the protruded gut, and attempting to return it, we raised up the testicle with it, and found that it was looped around the cord. Having been extremely careful in our manipulations, I cannot think that we used force enough to burst the sac and thus permit the intestine to slip over and behind the testicle, and yet unless this was done I do not know how to account for the case. It may possibly have been a congenital hernia. The man recovered entirely, and has since been well.—*Peoria Med. Mo.*, Feb., 1888.

Quack Advertisements in Religious Newspapers.—From time to time medical men and medical journals have protested against the prostitution of the columns of religious newspapers to the use of advertisers of quack nostrums. This protest does not apply to temperately worded representations of what seems to have been accomplished by, or what may reasonably be expected of, a remedy or device for the cure of disease or injury. But it does apply to advertisements couched in language which bears the stamp of falsehood on its face, or which is of such a character as to arouse suspicion in the mind of an intelligent man, uninfluenced by a money consideration.

The editors of most religious journals are, as a rule, men of so much intelligence that they will hardly attribute to tradejealo sy alone the objection which medical men have to the recommendation of "sure cures" for baldness, fits, rupture, consumption, and so on, to persons who are apt to regard their religious teachers as safe guides in matters of health or disease; and who are not sufficiently familiar with the subtleties of the newspaper business to distinguish between the responsibilities of the editor and those of the publisher. As a fact most readers of periodicals have the impression that the advertisements they contain are endorsed by the editor. Advertisers rely upon this fact; and we cannot understand the casuistry which satisfies the conscience of a man who edits a periodical, ostensibly devoted to religion, which replenishes its coffers with the price of palpable falsehoods.

If it were true that a religious paper could not be financially successful without taking money for the advertisements of worthless or delusive remedies, a course might be suggested worthy of the main object of these papers. But it is not true; for there are a few happy illustrations of the fact that, even in a religious newspaper, "honesty is the best policy."

We call the attention of our large circle of readers to this matter, in the hope that they will use their influence to put an end to what we regard as a serious blemish in religious newspapers, and one which injures the good reputation which they ought to enjoy. And we call the attention of those religious newspapers to which our remarks may apply to this matter, in the hope that we shall not have to recur to it in a more explicit manner.—*Med. and Surg. Reporter*, Dec. 31, 1887.

Townsend (C. W.) on Incontinence of Urine in Children.—After reviewing briefly the physiology of micturition and speaking of the importance of investigating the cause in every case of incontinence, the writer gave the following list of causes:

I. Reflex.

(1) Increased quantity of urine: (*a*) diabetes; (*b*) nephritis.

(2) Irritant quality of urine: (*a*) increased acidity: (*b*) uric acid crystals; (*c*) calcic oxalate crystals; (*d*) excess of phosphates.

(3) Vesical calculus.

(4) Hypersensitive state of external genitals from: (*a*) stricture of urethra; (*b*) phimosis; (*c*) balanitis or vulvitis.

(5) Anal irritation from: (*a*) pin worms; (*b*) eczema; (*c*) fissure.

(6) Psychical.

(7) Increased irritability of bladder.

II. Atony of sphincter vesicæ.

(1) General debility.

(2) Spinal disease.

(3) Acute febrile disease.

III. Malformation of bladder or urethra.

Of 355 children, 179 boys and 176 girls taken at random among the lower and middle classes, 77, or 21⅞ per cent., were found to be incontinent, the limit of normal incontinence being placed at three years. The majority of normal infants were found to stop wetting their clothes under one and a half years of age. Among the points brought out by an analysis of the 77 incontinent cases were: that 42 were boys, 35 girls; that in 47 the incontinence was nocturnal only, in 2 diurnal only, and in 28 both nocturnal and diurnal. In 63 incontinence continued from infancy; in 14 it came on after the primary incontinence of infancy had ceased.

In discussing treatment the usefulness and evil of corporal punishment in the majority of cases was spoken of. In regard to the operation of circumcision and breaking up adhesions between the corona and glans, its usefulness was recognized and cases cited, but it was not regarded by any means as always curative, for other causes might be operative. The investigations of Parks, who found more or less adhesions in 80 per cent. of boys under nine years, were mentioned as showing that adhesions are far from being always a cause of the trouble. Where no other cause could be found other than an increased irritability of the bladder, the use of belladonna in full doses till physiological effects appear had generally been found to give satisfactory results.—*Bost. Med. and Surg. Jour.*, Feb. 16, 1888.

Stone in the Stomach.—Concretions, or stones, are not often found in the human stomach, though the bezoar of the abomasum and intestines of ruminants is well known, and in olden days was very highly esteemed as a remedy against poisons and infectious diseases, being even worn as a charm. Human intestinal agglomerates are occasionally found in oatmeal-eating districts, and have sometimes been dignified by the name of "avenoliths." An enterolith was found by Laugier in a human subject, the nucleus of which was formed by a piece of liquorice root. True gasteroliths are, however, occasionally found in human stomachs; thus Schönborn was able to collect seven such cases, all of which appeared to have formed round a nucleus of hair; one of these weighed two kilogrammes. Quite recently a Dutch physician, Dr. H. A. Kooyker, has described a case of a true gastric concretion weighing 29 ounces, in which there was no nucleus at all. The patient was a middle-aged man, who was so averse to examination and manipulation of all kinds that it was very difficult to form a diagnosis of his disease. He occasionally vomited blood, and gradually became more and more emaciated. A tumor was felt in the epigastrium, but its nature was not made out until the post-mortem examination revealed a stone measuring seven by three inches, nearly filling the cavity of the stomach. There was also a smaller stone situated at the pyloric extremity. These stones were of a brownish color, and the large one contained several cavities. It had an offensive smell like that of fæces. A number of vegetable cells were found in it, but it was devoid of concentric or other structure.—*Lancet*, Jan. 28, 1888.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital.

VOL. V., NO. 12. March 22, 1888. WHOLE NO. 60.

CONTENTS.

	PAGE
Leading Article	137
Occasional Report on Otology and Ophthalmology	145
Pathology	148

LEADING ARTICLE.

On Strophanthus.—Strophanthus is rapidly assuming its proper place as a therapeutic agent, and its true value as a cardiac tonic will soon be well established. The name is derived from the long, cord-like processes which hang from the carolla of its flower. The plant is a native of Central Africa, and is also found in Java and Sumatra. It is a climbing plant of the natural order of Apocynaceæ, and quite a number of varieties are known. The best known member of the order is the *strophanthus hispidus*. All the varieties possess pods with a woolly lining, each pod containing from 200 to 300 seeds.[1] The follicles are nine to twelve inches long, and about three quarters of an inch in diameter in the thickest part. On cross-section the pods are almost circular, brownish-gray exteriorly, and somewhat furrowed on one side. The seeds average five eighths of an inch in length by about one quarter in breadth. Externally the seeds have a yellowish-green color, and are covered with fine hairs; internally they are of a white color. The seeds have very little odor; the taste is oily and bitter.[2] The medical preparations are a tincture made from the seeds and an alkaloid, strophanthin, extracted from them. It is stated[3] that there is now in the market a white variety of the seeds from which the natives of Central Africa make their famous "kombé" arrow poison.

The tincture is a one-to-twenty alcoholic extract of the seeds, and is given in doses of two to five minims three times a day. The alkaloid, strophanthin, is given in doses of one to two milligrammes, dissolved in water or aqua laurocerasi. The preparation of the alkaloid has been perfected by Fraser,[4] whose process is as follows: The oil is separated from the alcoholic extract by means of ether, then dissolved in water; tannic acid is added and the resulting tannate treated with oxide of lead and then extracted with rectified and proof spirit. Ether is added, and the resulting precipitate dissolved in weak alcohol. Carbonic acid is passed through the solution for several hours to get rid of the lead. After filtration the solution is evaporated at a low temperature, and the product is dried *in vacuo* over sulphuric acid. Strophanthin is crystallizable, faintly acid in reaction, intensely bitter in taste, freely soluble in water, somewhat soluble in alcohol, insoluble in ether and chloroform. It burns without residue and does not contain nitrogen. It is decomposed by most acids, glucose, and another body, to which the name strophanthadin has been given by Fraser, is formed.

The physiological action of strophanthus has been studied by Fraser[5] by means of comparative experiments between the action of digitalin and strophanthin. He found that inconceivably small doses (one part to six million) of strophanthin affected the heart, and that unlike the action of digitalis it did not constrict the small blood-vessels. Strophanthin acts as a diuretic, but the modus operandi of such action has

[1] Quinlan, *Brit. Med. Jour.*, Aug. 27, 1887.
[2] Bastin, *Med. Standard*, April, 1887.
[3] *Med. Register*, Aug. 20, 1887.
[4] *Brit. Med. Jour.*, July 23, 1887.
[5] *Brit. Med. Jour.*, Nov. 14, 1885.

not as yet been determined. Aulde[1] believes it to be due to increased activity of the vascular system; and, as a consequence of this, increased glandular activity. In his experiments on animals Bahadhurji[2] has noted a marked effect on the nervous system; the animal being first hyperæsthetic, and this being followed by muscular weakness and abolition of the reflexes. In the human subject the drug's principal action, according to Poulet,[3] is in causing ventricular contraction. As it has no vaso-constrictor effect it can be used in many cases where digitalis is contra-indicated, and it is particularly serviceable in arterio-sclerosis, parenchymatous and interstitial nephritis, and certain hemorrhages. Though the effect of a single dose can be detected by the sphygmograph for hours,[4] or even days, after administration, yet, the action of the drug is not cumulative, and so it can be used with safety in inflammatory diseases where there is threatened heart failure.

According to Hochhaus[5] the drug sometimes causes a loathing of food, followed by choking and vomiting, after eating, and occasionally by diarrhœa. Hochhaus advises that not more than twenty drops of the tincture three times a day should be given, and that the initial dose be small, say three drops of the tincture, and that the doses be increased gradually until the desired effect is produced.

During the past two years strophanthus has been used for almost every form of cardiac or renal disease, and in the majority of cases the result has been a satisfactory one. When the action of the drug was disappointing, the failure almost always seems to have been due to a poor preparation. Broadbent[6] recommends the addition of half a drachm of ether to the doses of strophanthus, and he has had good results from this combination when the strophanthus alone failed.

In a very bad case of double pneumonia, with heart failure, he combined strophanthus with an expectorant, and the case got rapidly worse, the respiration going up to 65, the pulse to 130, and the patient became very cyanotic. As a last resource he gave strophanthus and ether only, with the result that the symptoms began to abate immediately.

Dutton[7] has noticed that strophanthus has in several cases, produced an intermittency in the heart's action, always relieved by increasing the dose. The salicylates can be given in combination with strophanthus when they cannot be borne alone on account of their depressing action on the heart.

Strophanthus has now been prescribed in many cases of heart disease, and it is pretty well determined that it is most useful in cases of valvular disease with failure of compensation. According to Rosenbusch,[8] it may be given with advantage when digitalis does not agree with the patient, and in cases of severe disturbances of compensation it may be used to maintain the effect of digitalis.

Snyers asserts[9] where an insufficient heart is furnishing its maximum amount of work strophanthus does no good.

In mitral disease it has been employed in the following cases:

Case 1.[10] Male, aged sixty-seven. Has never had acute rheumatism. Has a mitral systolic bruit, most audible at the apex of the heart, hyper-resonance on percussion, generally over the chest, with prolonged expiratory murmur and minute crepitation at the base of both lungs. The urine was slightly albuminous and very scanty, of specific gravity 1020, and no casts; pulse 92, feeble and irregular. The amount of urine secreted was scarcely eight ounces a day, and there was considerable anasarca. The treatment consisted in the administration of hydrogogue purgatives, such as compound jalap powder, and various diuretics, such as carbonate of potash, squills, digitalis, and blue pill, but without any marked increase in the amount of urine. At this time orthopnœa was very distressing, and the patient was obliged to sit upright in an arm-chair night after night. On April 26th the urine was so scanty that it could not be collected for measurement, and the anasarca was rapidly increasing, and the crepitation over the bases of the lungs had considerably extended. The pa-

[1] *Med. Register*, Jan. 19, 1888.
[2] *Brit. Med. Jour.*, Sept. 17, 1887.
[3] *Bull. Gén. de Therap.*, Dec. 30, 1887.
[4] Purdy, *Chicago Med. Jour. and Exam.*, March, 1887.
[5] *Deutsche. med. Wochensch.*, No. 43, 1887.
[6] *Brit. Med. Jour.*, Oct. 15, 1887.
[7] *Brit. Med. Jour.*, Jan. 21, 1888.
[8] *Berl. klin. Woch.*, Feb. 13, 1888. (*Med. News*, March 3, 1888.)
[9] *Ann. de la Soc. Méd.-Chir. de Liège*, Jan., 1888.
[10] Budd: *Lancet*, Sept. 10, 1887.

tient's face was livid and extremities cold (pulse 100, feeble and irregular), and he was evidently in a critical condition. Five minims of tincture of strophanthus were ordered to be taken three times a day. On April 28th the condition of the patient was much improved, his pulse was considerably stronger and quite regular, and the quantity of urine began to increase, and amounted to thirty-five ounces in the twenty hours. There was also a marked amelioration in all his symptoms. A week later over 100 ounces of urine were passed in the twenty-four hours. On May 18th the œdema had disappeared to a great extent, and that of the lungs had entirely cleared up, air passing freely into the lungs. On May 30th it was noted that the anasarca had absolutely disappeared. On June 16th the patient was free from dropsy and from œdema of lungs, and expressed himself as feeling very well.

Case 2.[1] Female, aged forty-one, and the mother of five children. There was a loud systolic bruit at the apex of the heart, the impulse of which was very much increased; the pulse was very small, and both irregular and intermittent. The liver was also considerably enlarged, extending two inches below the margin of the ribs, and there was a certain amount of ascitic fluid in the peritoneal cavity. Urine contained one third albumen: specific gravity 1015. No casts could be detected under the microscope. She stated that considerable œdema of the legs had existed for many weeks. She was ordered tartrate of iron, with squill and digitalis, and also lemonade made with acid tartrate of potash, and compound jalap powder every other night. The urine was very scanty, and very little improvement took place. On March 23d five minims of tincture of strophanthus were ordered three times a day, the compound jalap powder to be continued every other night. On March 25th the pulse was stronger and more regular; the urine by measure was found to be 16 oz., and increased in amount daily, reaching 78 oz. one day. On April 14th there was only a trace of albumen present, and the œdema of the legs was much reduced, as was also the amount of ascitis. On April 30th she was quite free from either œdema or ascitis, and she expressed herself as feeling as well as she had been for years.

[1] *Ibid.*

Case 3, reported by Dr. Hill.[2] An adult male had been for many years the subject of mitral regurgitant disease of the heart, and during the last few years a certain amount of œdema of the lower extremities had been developed, which at the time of his commencing the use of strophanthus was very considerable, extending to the upper parts of the thighs, scrotum, etc. He had also, during the last few months, been twice aspirated for hydro-thorax of the right pleura, on each occasion a large quantity of fluid being withdrawn. He also suffered greatly from very painful and intractable flatulent distension of the abdomen, arising apparently from atonic dyspepsia, which made his life miserable, and necessitated a very restricted diet.

The administration of strophanthus in medium doses of five minims of the tincture in half an ounce of water, three times a day, was quickly followed by a marked improvement in his condition. The pulse, which had been for some time 96, and occasionally higher, very feeble and irregular, fell on the second day to 80, and became much fuller, stronger, and comparatively regular. The renal secretion had increased on the third day from about 30 ounces to 80 ounces in the twenty-four hours, and the œdema decreasing *pari passu*, in a few days very little remained. The flatulent distension ceased to trouble him, and no further pleuritic transudation has taken place, while the pulse remains at from 70 to 80, fairly strong, and quite regular. The patient had previously been obliged to discontinue the use of digitalis in consequence of evidences of its cumulative action producing attacks of faintness, so that strophanthus came to his relief as a friend in need, and proved itself in this case a very valuable cardiac tonic and regulator, and a powerful diuretic. He took it steadily for upwards of a month with decided advantage, during which period his strength had been much taxed by an attack of bronchitis, which has considerably retarded his progress, but through which strophanthus has greatly helped him; in fact, in his own opinion, has pulled him through where he would otherwise have succumbed.

In the administration of this drug it is an important injunction that the tincture, the dose of which is from two to ten drops,

[2] *Brit. Med. Jour.*, April 2, 1887.

should not be diluted except at the time of using.

Case 4, reported by Hutchison.[1] The patient was a woman, aged forty-five, in whom there was a loud murmur, both obstructive and regurgitant. The prominent symptoms were harsh, hacking cough occurring in paroxysms, dyspnœa, and even at times orthopnœa, palpitation, and œdema of feet and legs. The pulse was intermittent, with a regular irregularity, and beating 90 to the minute. Strophanthus was given in half-drop doses at first, and was gradually increased until she was taking two minims three times a day. Almost from the first dose taken an alteration in the sufferings of the patient was observed. The heart-sounds were firmer and steadier; the pulse-beats, though still irregular, were not so fast; cough was much less troublesome; and the palpitation was neither so frequent nor so violent. Along with this there was a copious increase in the renal secretion, which soon relieved both the visceral engorgement and the œdema in the feet and legs. In fourteen days she felt so well as to be able to return to her household duties.

Cases 5 and 6, reported by Quinlan.[2] A grocer, aged forty, suffered from mitral stenosis, with great œdema of the legs, thighs, and scrotum, so great as to require acupuncture. His breathing was very bad. and he could not take exercise; indeed, he could hardly walk even after the surgical relief. He got great benefit from strophanthus, and began to walk about. The œdema now commenced to return, but a renewal of the strophanthus appeared to check and reduce the effusion. He is now convalescent, can go about, and even attend a little to business.

A male, aged twenty-nine, suffered from mitral stenosis with hypertrophied heart. There was much difficulty in breathing, with frequent bleeding from the gums. Both these symptoms were relieved in a marked degree by the strophanthus, and he left the hospital much improved.

Case 7, reported by Aulde.[3] A lady, under thirty, gradually developed dyspnœa with arhythmic cardiac action, and slight mitral regurgitation, but there was no œdema. Inability to walk, even a short distance, was the principal difficulty. Two and a half minims of strophanthus tincture, three times daily, gave almost immediate relief. This case belonged to that class known as the irritable heart of lithæmia.

Case 8, reported by Holroyde.[4] A woman, aged thirty-six, suffered from mitral obstruction and regurgitation. She was subject to periodical attacks of cough and dyspnœa, accompanied by marked irregularity and feebleness of pulse. Sickness was also a prominent symptom, and there was slight œdema of the lower extremities. She has always been treated with a mixture of iron and digitalis, which speedily relieved all her symptoms. During her last attack the tincture of strophanthus, in five-minim doses, was tried, but beyond increasing the force of the cardiac impulse and the quantity of urine voided, it had no effect on her symptoms, except to make the sickness worse. A return to the usual iron mixture soon gave her relief.

Case 9, reported by Drasche:[5] It was a mitral stenosis, with greatly aggravated symptoms and extreme cyanosis. After a second dose of forty-five drops had been given the pulse fell from 84 to 44 beats per minute, and the respiration from 36 to 18, the dyspnœa disappearing, and the heart's action becoming stronger and less irregular.

Hutchison reports[6] the following case of aortic stenosis, in which he tried the drug: An old lady, aged sixty, who had for years been a martyr to chronic cough, palpitation, and the other symptoms attendant upon stenosis of the aortic orifice, received great relief from a one-minim dose of the drug. In this case palpitation was very violent, the pulse was rapid, and there was extensive passive congestion of both lungs. Œdema of the feet and legs was also present in a marked degree. Under the influence of strophanthus the pulse became slower and firmer, the congestion in the lungs lessened day by day, and a copious diuresis soon made an alteration in the œdema. The palpitation was trifling compared to what she previously suffered, and her cough was much relieved.

Drasche[5] reports that in several cases of aortic insufficiency the strophanthus tincture invariably slowed the pulse, rendering

[1] *Brit. Med. Jour.*, May 7, 1887.
[2] *Brit. Med. Jour.*, Aug. 27, 1887.
[3] *Med. Register*, Jan. 14, 1888.
[4] *Brit. Med. Jour.*, Oct. 15, 1887.
[5] *Wien. med. Blät.* (Weekly Med. Rev., March 31, 1888.)
[6] *Brit. Med. Jour.*, May 7, 1887.

it fuller and stronger, and giving rise to quiet sleep, a condition of things that had not occurred for some time before. This experience alone, if fully corroborated by future use, is sufficient to place the remedy on the highest pinnacle of practical utility and value.

Holroyde[1] reports the following case: A boy, aged seven, with aortic and mitral regurgitation, has attacks of angina pectoris, cough, dyspnœa and general anasarca. Cardiac impulse is very violent, but not irregular. Urine scanty. Strophanthus was given in three-minim doses, thrice daily, and the effect was simply marvellous. The secretion of urine soon became abundant, cardiac impulse less violent, anginal attacks quite ceased, and in three weeks' time the dropsy had entirely disappeared. The drug was then discontinued, and now, three months afterwards, the child is better than at any period during the past three years.

Makuna[2] has used it in four cases of angina pectoris, in two cases associated with dilatation of the heart. A fortnight ago he was hurriedly called to see a young man, aged twenty-five, in an agony of pain, with tumultuous action of the heart. Within five minutes of the administration of a five-minim dose his breathing became quiet, pain disappeared, and the rhythm of the heart's action was restored.

While authorities differ as to the exact effect of the drug upon fatty heart, most agree that it is more often beneficial than otherwise.

Drasche[3] tried it in a case of fatty heart in a man thirty-six years of age, with very pronounced symptoms. In this case he found that the tincture in ten-drop doses quieted the pulse-beat, relieved the dyspnœa, and naturally benefited the case. He states that 160 drops of the tincture were given in five days without the slightest evil influence. In another case similar to this one, forty drops were given daily, and the same marked results followed, and each time with a decided increase in the secretion of urine.

Makuna[4] used it in two marked cases of fatty degeneration of the heart. In a patient, aged forty-five, the state of degeneration was much advanced, and she had some general dropsy. She lived to take it for nearly eight months—five-minim doses three times a day; but about six months after its first administration the cardiac response became more and more feeble, until she succumbed. The author believes her life was prolonged with some comfort solely by the use of strophanthus. He reports a second case of fatty degeneration of the heart in a woman, aged forty-nine, accompanied by attacks of angina, much dyspnœa, and palpitation. She took five-minim doses every hour till the action of the heart was quieted and the breathing rendered easy.

According to Quinlan[5] a male, aged seventy-two, suffered from fatty degeneration of the heart, accompanied by weak, rapid, and irregular action. The diseased action of the heart was accentuated by the least exertion. The strophanthus steadied and strengthened his heart, and enabled him to walk about in comfort, and to his great satisfaction. As soon as he stopped the medicine, the former state of things returned, and he left the hospital not improved.

Liddell[6] had two cases of degeneration, in each of which the heart and general condition of the patient were markedly ameliorated, not only during the time strophanthus was administered, but also after the cessation of treatment.

Snyers[7] asserts that the medicament is useless in cases where degeneration of the miocardium exists.

In functional disturbances of the heart the drug seems to affect some cases better than digitalis.

In nine cases in which Hutchison[8] administered the drug he could find no trace of a murmur, and the purpose for which the medicine was administered was to allay in some measure the turbulent palpitation of which these people complained. In seven of these cases the palpitation seemed to be dependent upon dyspepsia; remedies were given for that condition. Strophanthus was also used in the hope of its exerting a calming and steadying influence upon the heart, which in all of them it succeeded in doing.

Two were cases of disordered innervation. The pulse was very rapid and ir-

[1] *L. c.*
[2] *Brit. Med. Jour.*, Sept. 3, 1887.
[3] *L. c.*
[4] *L. c.*
[5] *L. c.*
[6] *Brit. Med. Jour.*, Oct. 29, 1887.
[7] *Ann. de la Soc. Méd.-Chir. de Liège*, Jan., 1888.
[8] *L. c.*

regular, the heart's action turbulent—so much so, that at times the sounds could not be differentiated, but seemed all merged in a confused rumble. Both of these patients were much benefited, and though the symptom of which they complained the loudest—namely, palpitation—was not banished, they found that it could be kept within reasonable bounds by a timely dose of strophanthus. All the patients expressed the opinion that the drug had a stimulating effect, which, however, soon wore off. Some of them professed to feel beneficial effects ten minutes after taking their appointed dose. The effect of the medicine was rapid, but did not remain long, and at the end of three or four hours required to be renewed. The system, it was found, quickly became used to the drug, and to get any amount of benefit the dose required to be gradually increased.

Sanctuary[1] reports the case of a retired Indian officer, subject to frequent attacks of liver indigestion, with the usual concomitant symptoms of jaundice, lithates in the urine, etc., who suffered from severe palpitation. He was an intensely neurotic patient, with a flabby, dilated, and irregular heart; but, on careful examination, could detect no signs of valvular disease, and there was no previous history of organic cardiac mischief.

He had been taking a prescription containing digitalis, which, up to the present, had been his "sheet-anchor," but which in this instance had apparently done him no good whatever. He was ordered the same prescription, substituting five-minim doses of the tinctura strophanti for the tinctura digitalis, three times a day. In twenty-four hours the palpitation was much relieved; in a week it had disappeared, and the pulse, which had fallen from 103 beats to 76 in the minute, was full and regular.

A patient of Quinlan,[2] aged thirty-six, with excessive anæmia and a cardiac murmur, was rapidly cured by the administration of an ounce of aromatic iron mixture three times a day, along with ten minims of tincture of strophanthus, and the same quantity of liquor arsenicalis. Looking to other similar cases treated with iron and arsenic only, it was evident that the strophanthus hastened recovery.

Liddell reports[3] the case of a woman, aged forty, who suffers from palpitation, and dyspnœa after food, sleep, and slight exertion; has been ill for several years; apex-beat hardly perceptible; first sound feeble and indistinct; lividity of lips, hands, and wrists; great dryness of the tongue. On February 11, 1887, he prescribed two minims of tincture of strophanthus three times a day; this was gradually increased to five minims. March 30th. Has had no palpitation for a fortnight; walks about with ease and comfort; pulse stronger; lividity much less; tongue much moister. Treatment stopped. June 14th: says she is "marvellously better."

Kiernan[4] has found that emaciated persons of alcoholic habits in whom the heart sounds have become weak, but in whom there is no clear valvular lesion, seem to do much better on strophanthus than on digitalis. In obese persons with fatty hearts he has found that the drug seems to have a decided cumulative action. As the drug has been much lauded as being destitute of a cumulative action, this fact should be borne in mind in prescribing it in such cases.

Fränkel[5] used strophanthus in twenty-two cases of cardiac disease. He found it most efficient in so-called functional disturbances of the heart, from excessive use of alcohol, tobacco, etc. It acted well sometimes in dropsical conditions; but it was never found to relieve dyspnœa, except indirectly, by relieving dropsy.

Dana[4] states that in one or two cases of Bright's disease in which he used strophanthus little or no striking benefit was observed as regards the cardiac irregularity and weakness, while in three cardiac cases progressive improvement occurred while the drug was being administered. In two cases marked improvement occurred after strophanthus was administered, while previously no special improvement was observed, three cardiac tonics having been already tried without avail in one case and two in the other.

Fürbringer[5] has treated 120 cases with strophanthus. Of these there were only thirty who had responded well to it, and of whom it could be said that the drug's action was permanently beneficial. He found, as had Dujardin-Beaumetz, that it was of no value in purely renal dropsy,

[1] *Brit. Med. Jour*, Dec. 3, 1887.
[2] *L. c.*
[3] *L. c.*
[4] Bastin in *Med. Standard*, April, 1887.
[5] Editorial, *Med. Record*, March 3, 1888.

and that in Bright's disease the drug is really not indicated at all.

Hutchinson,[1] however, has seen it do good as a diuretic in renal colic, and records the case of a man, aged 52, who consulted him on account of pain in the lumbar region, extending round the abdomen and into the bladder. He had suffered all his life at times from "gravel." The present attack commenced with lumbar pain aggravated by exercise. The urine was scanty, and micturition difficult; at first the urine was high in color, then it become smoky, and when seen by the author it looked like pure blood. On examination no tumor could be felt, but great pain and tenderness were complained of on deep pressure over the left kidney and along the left ureter. He was ordered turpentine stupes across the loins, plenty of fluid to drink, a seidlitz powder in the morning, and tincture of strophanthus in five minim doses three times a day. In a few hours the pain became much worse, but a copious diuresis soon followed, and next day he seemed quite free from pain. The patient stated he had never been relieved so rapidly—a fact attributed by Dr. Hutchinson to the diuretic action of strophanthus.

Other observers point out the fact that the dropsy must be of cardiac origin to hold out any hope of relief from strophanthus.

Dr. Collins[2] gives an account of a case in which he began with two and one half minims three times daily. The patient, an elderly gentleman, had long suffered from a cardiac affection, and lately œdema of the extremities had commenced. The œdematous condition had persistently increased, notwithstanding the most earnest solicitations, so that locomotion was out of the question. Commencing with this small dose, the encouragement was sufficient to warrant an increase, and the second day the dose was accordingly increased to four minims, and to six minims the day following, and with very happy effect. To use the doctor's own words, "in four or five days the legs were like pipe-stems."

Dr. A. A. Smith[3] states that strophanthus had been used in two cases of pulmonary œdema with good results. The first was a case of mitral systolic and double aortic lesion in which pulmonary œdema developed after unusual exertion. Five minims of the tincture were given every four hours, and the patient recovered. He also reports a case of pulmonary œdema occurring in pneumonia, and a case of emphysema, in which this drug produced excellent results.

In the weak heart of acute febrile diseases Quinlan[4] has found it beneficial. He narrates a case of typhoid fever of a very bad type running to forty-two days, with two relapses and a continuous tendency to failure of the heart; complete recovery. This case was given strophanthus, when quinine, port wine, and nourishment were evidently going to fail.

A brother of the above, with severe typhoid fever running to twenty-eight days, had one relapse. Same tendency to cardiac failure, which was, however, entirely controlled by the strophanthus.

A girl, aged 17, had typhoid fever running to twenty-one days. Great cardiac depression in the middle of her sickness at once relieved by the strophanthus.

Boyd[5] publishes the following notes of a case of acute heart failure from suppuration and exhaustion. The patient, male, aged about 50, suffered from an extensive cervical carbuncle encroaching on the scalp. It was opened to relieve the urgent head symptoms and the tension of the scalp; suppuration was very profuse, but of an unhealthy character, and so thick and flaky that tubes were useless. Twelve days afterwards a second abscess was opened. The patient was now getting low, although up to this time he was taking a large quantity of liquid nourishment, with a liberal supply of stimulants, and a mixture containing quinine, strychnine, and digitalis, given alternately with tincture of iron. Notwithstanding all this, the inflammation continued to spread down the muscles of the neck. The temperature ranged from 100° to 104° F.; there were profuse perspirations, the pulse became rapid, weak, and shallow, food was being refused; the patient was getting listless, with foul breath, face blue and dusk, particularly the ears and lips, eyes discolored and extremities cold, lungs dull at the bases from passive congestion—in fact, a general septic condition. Matters were now assuming a serious aspect, and every thing depended on his being able to sustain the

[1] *Provinc. Med. Jour.*, Oct., 1887, and *Lond. Med. Record*, Dec., 1887.
[2] *Med. Register*, Jan. 14, 1888.
[3] *Med. Standard*, April, 1887.
[4] *L. c.*
[5] *Brit. Med. Jour.*, June 18, 1887

cardiac action: but the customary remedies failing, he determined to give strophanthus a trial. He now administered six drops of the tincture with the following result. The patient gradually fell off to sleep, although he had not had any for thirty-six hours, slept over two hours, during which time his eyelids were half open, and his eyes were observed constantly rolling, and the limbs twitching from time to time. He awoke greatly refreshed[1] and much quieter, and his pulse improved both in power and frequency. The dose was repeated every six hours, and always with the same result—a quiet sleep; and this he could always calculate on.

Three days from beginning the strophanthus, another large abscess was opened, and again in seven days the fourth was opened. From this date the patient made rapid progress, the temperature became normal, the pulse improving from day to day, also the appetite. Although he was so exhausted on the last day of operating as to be unable to turn himself in bed, within one week he was sitting up, and before a second week he was at the seaside.

Several observers have thought they noticed an antipyretic action of the drug. Drasche[2] in pneumonia found that when given in 5-drop doses for a period of twenty-four hours, it caused a fall of pulse beat 18 to the minute, and an almost corresponding fall in the temperature. In phthisis its use was attended by the same good results, acting promptly and favorably, dissipating high temperature and lessening the frequency of pulse and respiration. Similar effects are claimed by Rovighi,[3] who employed the drug in tuberculosis and typhoid fever.

Zerner and Löw[4] deny its power to lower the temperature of the body, as they tried in vain to obtain this effect in bad cases of pneumonia. Indeed, unless in the stage of collapse, when strophanthus is eminently useful from the rapidity of its effect in stimulating the heart, they consider that this medicine is contra-indicated in pneumonia and fevers generally.

There are many dissenters to the efficacy of this much lauded drug however. One of the first and most prominent men to protest against the unstinted praise meted out to it was Suckling. After using it several months he says[5]: "In all my cases hitherto I have found that, though tincture of strophanthus has done some good, yet the substitution of an equal quantity of tincture of digitalis has been attended with marked benefit, and I have ceased to prescribe strophanthus where it is important to obtain an immediate improvement. I have found that vomiting occurs from strophanthus quite as frequently as from digitalis; and in my opinion strophanthus, at any rate in the dose and preparation at present in vogue, is decidedly inferior to digitalis in its action in heart affections."

Donovan too has[6] tried strophanthus and found it much inferior to digitalis in the treatment of disease of the heart.

He has tried it all round in the form of tincture and tabloids, in weak heart, cardiac dropsy, and in intermittent heart, etc.

He says: "Give digitalis a fair field and it will beat all the nostrums advocated from time to time. Digitalis, to get fair play, must be used without stint—10-, 15-, or 20-drop doses, combined with strychnine, as the case demands, and then it proves that it is unequalled as a cardiac remedy."

Liddell says[7]: "In some cases of failure of the circulation I have found strophanthus give little or no relief, and on administering digitalis benefit has resulted. This occurred in four cases, each with a somewhat similar history. They were elderly people with degeneration of the arteries; the heart beat vigorously; there was dyspnœa with palpitation; the pulse was feeble, and more easily compressible than usual. Strophanthus failed in these cases to give relief; digitalis was then given, and procured marked benefit. The pulse gradually became stronger and less easily compressed and, *pari passu*, the heart beat less vigorously, and the præcordial pulsation became less pronounced. In these cases there appeared to be deficient tonicity of the arterioles, and under the influence of digitalis the necessary tonicity was regained."

Gutman[8] reports the results of his expe-

[1] This seeming hypnotic action of the drug has been noticed by others. See *Med. News*, Feb. 18, 1888.
[2] *L. c.*
[3] Quoted in New Orleans *Med. & Surg. Jour.*, March, 1888.
[4] *Brit. Med. Jour.*, Feb. 18, 1888.
[5] *Brit. Med. Jour.*, Nov. 19, 1887.
[6] *Brit. Med. Jour.*, Dec. 3, 1887.
[7] *L. c.*
[8] Editorial, *Med. Record*, March 3, 1888.

rience in about forty cases. He was especially impressed with the diuretic effect of the drug, though it was not uniform in its action in this respect. It acted as a heart-tonic in some cases, but was not so trustworthy as digitalis.

Haas is not willing to allow that strophanthus is at all superior to digitalis. He has seen patients with valvular stenosis become cyanotic, complain of great dyspnœa, and go into collapse.

EDWIN T. DOUBLEDAY, M.D., and R. W. AMIDON, M.D.

OCCASIONAL REPORT ON OTOLOGY AND OPHTHALMOLOGY.

BY A. T. MUZZY, M.D.

Grant (J. D.) on Compression of the Vertebral Artery in Relation to Pulsating Tinnitus Aurium.—The arterial supply for the labyrinth comes by the internal auditory artery from the basilar, a continuation of the vertebrals united. If tinnitus comes from congestion of this chamber, then it follows that it ought to be checked by pressure on the vertebral arteries. By pressure, exerted by means of the thumb and finger in the hollows behind the mastoids and the transverse processes of the atlas (corresponding to the space bounded by the rectus capitis posticus major, the obliquus superior, and the obliquus inferior on each side), I found I could check *pulsating* tinnitus in a large number of cases. It was afterwards tested on the cadaver by means of water and a syringe. It is easy to find the exact points when pressure is to be exerted on any patient suffering from tinnitus from salycin or quinine. It is a good method of diagnosing labyrinthine congestion, in which case hydrobromic acid is a valuable remedy. Even pressure may be employed as a palliation by properly constructed pads applied to these hollows.—*Brit. Med. Jour.*, Dec. 24, 1887.

Hunt (J. M.) on Alarming Syncope from Syringing the Ear.[1]—On August 7th a boy, three years old, was found in a state of profound coma, with slow, irregular respiration, rapid pulse, lividity of lips, cold extremities, dilated pupils, in fact apparently at the point of death. Since an attack of measles two months ago, has had running from right ear. This was being treated under medical advice with syringing of a boracic-acid solution. On the day mentioned first, just as syringing had ceased, the child fainted. Until this happened the child had been running about. Syncope had lasted a half hour when seen. Mustard plaster ordered to nape of the neck, and moistening lips with brandy and water. In two hours, when seen again, consciousness had returned, and apparently well, save being languid and pale. Ear showed extensive destruction of membrana tympani, but no signs of caries.—*London Lancet*, Oct. 15, 1887.

Pomeroy (O. D.) on a Case of Desquamative Inflammation of the Middle Ear.—A case of chronic suppurative otitis media of the right ear appeared for treatment in February, 1887. This condition had existed for ten years. A similar condition had also existed in the left ear, but had healed two years ago, and has left a much cicatrized membrane. The discharge from the right ear is very offensive. She has occasional pain, sense of fulness, and sometimes sweating. About a year ago, flakes with offensive odor appeared in the discharge. Examination showed large deposits of epithelial detritus, and the drum was hidden by substance resembling aspergillus, except in color. After many attempts the mass was removed, showing a reddened, slightly bleeding surface of partially destroyed and agglutinated drum membrane. The mass, on examination, proved to be epithelial cells, cerumen, and sebaceous matter, but no aspergillus. In sixteen hours after removal the mass was reproduced in larger amount than before. For a week a solution of arg. nit. (40 grs. to the ounce) was instilled, but the excretion remained considerable. Then a solution of hyd. bichlor. (1 gr. to the ounce) was substituted. In eight days the desquamations had ceased to make their appearance. Subsequently dry packing with boric acid completed the treatment. Aside from the microscope this condition may be differentiated from aspergillus by the odor. The appearance of the membranes after removal of the mass was wonderfully like aspergillus.—*New England Med. Monthly*, Nov. 15, 1887.

Barr (T.) on Traumatic Affections of the Ear.—(1) *Peculiar fracture of*

[1] See MEDICAL ANALECTIC, 1888, pp. 118, 119.

tympanic plate of external auditory canal. A woman, aged fifty, came for removal of supposed pin in wall of left external auditory canal. Four weeks previously, while half asleep, lost hold of a pin with which she was pricking the ear. The family physician was called directly. He made attempts to remove the supposed pin by use of forceps. After some effort a snap was heard, supposed to be the breaking of the pin. But at no time has a fragment of a pin been seen to come away from the ear. Examination shows purulent discharge, a polypus arising from the antero-inferior wall, and removing this, a fistula leading to a hard rough surface detected as bone, not metal. After a few days, two fragments of dead bone were removed, recognized as part of the tympanic plate. In two weeks' time ear had healed completely. Probably either the pin did not enter the ear, or soon afterwards and before seen by the family doctor, slipped out unperceived. The doctor, taking it for granted the pin was there, grasped at hazard, causing a break in the skin first, when a subsequent use of the forceps would readily engage the temporal plate, the snap heard being the breaking of the bone.

(2) *Rupture of membrana tympani by a blow of a tennis ball.*—Four months ago a lady playing tennis was forcibly struck on the tragus of the right ear by the ball. Great pain, with intense noise in the ear, immediately ensued, and shortly afterwards she was seized with nausea and vomiting. Pain entirely prevented sleep the whole of the following night. The next morning a discharge commenced, which still continues, as also considerable annoying tinnitus and throbbing in the ear. Both ears perfectly normal up to the time of the accident. Examination shows an oval opening 2 mm. in length at the lower end of the manubrium. A muco-purulent discharge issues from this aperture. Hearing is $\frac{9}{10}$ inches for the watch; Rinne's test shows excess of bone- over air-conduction of twenty seconds. Treatment by insufflation of boracic acid and Politzer inflation put an end to the discharge and increased hearing distance 100 per cent., while tinnitus has not quite disappeared.—*Edinb. Med. Jour.*, Jan., 1888.

Alt (A.), Some Remarks on Congenital Cataracts.—A strange fact about the different blind asylums and schools is, that many of the children who are every year placed in them could by an operation be made seeing and useful members of society. Most of these cases are affected by so-called congenital cataracts. And the majority of these in turn seem to be of the zonular form. Generally these cases are of some age before they appear for operation.

From results of observation after operation, there can be no doubt that amblyopia from disuse does occur. Thus immediately after the operation $V = \frac{20}{cc}$, but subsequently registers $\frac{20}{xl}$, as has been noted in some cases. Another fact noticed is that these cases are often received and kept in asylums and schools, and not permitted to be operated upon. The reasons for this hesitation to give the patients advantage of the operation differ. In some no doubt it is from ignorance of the success attending such procedure; but in not a few it is for fear of reducing the numbers in the institution relative to public grants. A law should therefore be enacted to subject all applicants for a blind institution to examination by an oculist, and operated upon where necessary. The term congenital cataract does not admit of clear practical use. The cases are not, save exceptionally, seen for months after birth. So that "infantile" would convey our meaning with less questioning. There are two general forms of infantile cataract,—the partial and total. The total are either soft or hard or the shrunken form, being mainly capsule with some frequently very hard lens substance. The partial may be pyramidal or anterior polar, a stationary form where we find in the vicinity of the anterior pole a peculiar tooth-like degeneration protruding into the anterior chamber, or zonular where one or more layers of the lens substance become opaque. This form is mostly stationary, yet in a number of cases it has proved progressive. The so-called posterior polar cataract is more justly the persistence of the remnants of the hyaloid artery attached to the posterior capsule.

No good, reliable cause can be given for this pathological condition. A more interesting question is, when should these cases be operated upon. As there is good reason to believe in an *amblyopia ex anopsia*, we should operate in every case of infantile cataract where no visible complication exists which *a priori* forbids us to operate, the chances for improvement being infi-

nitely greater than the reverse. And the operation should be performed as soon as possible, meaning by this as early as after three months of life, save in stationary partial cataracts. In this last form we may well wait until the patient has attained such an age that he can help us in forming a true conception of the condition presented. Yet we should not hesitate a moment longer than necessary, since we lose valuable time and, perhaps, not only a decided influence upon the child's sight, but also upon its character and thus upon its whole future. There are three forms of operation for this condition, viz.: extraction, discission, and iridectomy. Extraction is imperative or practicable in only a few cases of infantile cataract, and only in cases of the total. Indeed, it is unnecessary except in cases of shrunken cataracts. The operation most generally useful is discission; even hard total ones will give way to this operation. With this procedure we preserve the iris intact. In partial cataracts, also, my rule is to perform discission and to repeat it until the best possible result is obtained. The results to vision are far superior after discission than after iridectomy. A short outline of 26 cases with 37 operations is appended, summarized as follows: Of these 26, 13 had zonular cataract in both eyes, 10 had total cataract (2 shrunken) in both eyes, 1 pyramidal in both, 1 a shrunken cataract in one eye and a zonular in the other; 1 had a total cataract in one eye alone.—*Am. Jour. Ophthal.*, Dec., 1887.

Chadwick (C. M.), on Case of Poisoning by Duboisine.—Atropine had previously been used on several occasions for examination of condition, which was senile cataract. Two disks, each containing a $\frac{1}{100}$ of a grain of sulphate duboisine, were employed. Soon afterwards felt giddy, and was quite restless. Was able, twenty minutes later, to undergo ophthalmoscopic examination standing. But soon afterwards was decidedly weak in the legs, losing control over them; throat very dry and having an exceedingly bitter taste. Thinking fresh air would do him good, started to walk home. His speech became husky and indistinct; he walked, talked, and behaved like one slightly intoxicated. Later, when at home, there was complete inability to stand without assistance or to recognize the position of objects—partly due to paralysis of accommodation and partly to hallucination. For example, he would suddenly sit on the floor, thinking a chair was ready for him, drop a glass in mid-air instead of on the table, and grasp in the air above his head for his watch which had been taken from him. It was difficult to get him to bed, and constant attendance only kept him quiet; there was incessant movement with suspicious looking under the bedclothes and behind him. A few minutes left to himself sufficed to upset the whole room; towels, brushes, and shoes placed in the bed, and boots on the dressing-table. Finally he fell to the floor, whence he could not raise himself without assistance. This activity was accompanied by a flow of words, sentences strung together without any apparent connection. Throughout an air of fun and humor, of childishness rather than violence. The pulse was slow, the patient quite ignorant of what was the matter, imagined it quite dark, though the middle of a sunny afternoon. Four hours after taking the duboisine symptoms subsided under hypodermics of morphia, patient falling asleep and waking quite clear, with no remembrance of all that had passed. The patient was generally upset for several days.—*Brit. Med. Jour.*, Feb. 12, 1888.

Muzzy (A. T.) on the Poisonous Effect of Duboisine Used as a Mydriatic.[1]—January 21, 1885, a lawyer, fifty-two years old, complaining of poor vision, was examined by me for relief. V = R $\frac{20}{40}$ w + 18″ c 90° = $\frac{20}{20}$; L $\frac{20}{40}$ accepts above but not improved. For midriatic a 4-per-cent solution of sulphate of duboisine was employed. A single drop in each eye proving slow in action, three drops more were instilled; the eyes then yielded readily though not wholly. Ophthalmoscope showed H = + 12″.

January 26th. Says that on leaving office on the 21st the knees felt weak, and was afraid he would be considered inebriated. Felt giddy but not nauseated. Before reaching home, some seven miles' distance, by train, ideas became somewhat confused, speech very ready. During the evening family became amused and some alarmed as he talked incessantly and disconnectedly. He was all the while conscious of some defect himself. There was some headache. He could not compose himself to reading or writing, and retired early. In going up-

[1] Original communication.

stairs he stumbled, and in undressing made various mistakes in calculating the position of objects, completely failing to wind his watch. He was wakeful and restless, and next day had a feeling of prostration. The sight was greatly impaired until the morning of the 23d from paralysis of accommodation, which prevented him, the 22d, from riding his horse as usual.

PATHOLOGY.

Money (A.) on Idiopathic Dilatation of the Colon.—An habitual drunkard, aged fifty-five, suffered from enormous distension of the colon, with dyspnœa and bronchitis ; the girth was over sixty inches, and the measure from the ensiform cartilage to the pubes twenty-six inches. There was albuminuria. He was treated first by repeated punctures. These gave great relief ; he improved so much that he refused further treatment, and returned to his drunken habits. He was admitted a week later with the same enormous distension, lividity and dyspnœa. He was much relieved with the long rectal tube, but sank and died a week after admission. At the necropsy all the signs of habitual drunkenness were found, including typical "hobnail" liver. There was enormous distension of the colon, principally of the sigmoid flexure, which formed two large sacs extending right across the abdominal cavity. There was no organic stricture. Dr. Money thought that a potential twist of the sigmoid flexure or a spasmodic stricture may have been present ; or else that some morbid state of the blood or nerves, or the mere presence of an excess of gas, may have started the disease. The bowel was hypertrophied as well as dilated.—*Lancet*, Feb. 4, 1888.

Burchmore (J. H.) on Head Injury Complicated by Typhoid Fever.—In August, 1887, a female patient, eighteen years of age, in good health previously. was struck several times ; one blow being upon the head, which knocked her down and rendered her unconscious for a short time.

The girl walked into the office and her general condition seemed about normal, with the exception of the evidence of a blow, which consisted of a swelling over the anterior superior angle of the left parietal bone. This swelling was perhaps two inches in diameter and half an inch or more in height, somewhat painful to the touch, and soft. She complained of some pain, which was confined to the left side of the head at the seat of injury. No evidences of fracture were obtained, yet a guarded prognosis was given in view of the violence of the blow and its location. Her friends were subsequently informed that it would be a question of months before it would be right to say that the patient was safe from the effects of the blow, it being possible for violent symptoms to set in at any time during that period.

The swelling gradually subsided to its normal condition in about ten days. The pain in the head also abated, and for twenty-four hours, at least, she was free from it. At this time my attention was called to some abdominal symptoms : a slight fulness over the intestines, with diarrhœa ; these, together with a slight rise in temperature for a day or two, caused a strong suspicion of typhoid fever as a complication. These symptoms continued and increased in severity, and, together with the "typhoid expression" of the face, if I may use the term, constituted sufficient reasons for a diagnosis. The mother was so informed, that the girl was now suffering from "abdominal" fever and not from the blow. She gradually grew worse and died in about a week. An inquest was held and a post-mortem examination sustained the diagnosis.

The man was indicted for murder by the grand jury and confined in the jail for two or three months. But at a preliminary hearing in November, before the honorable judge of the criminal court, the facts as above given were emphatically stated and the man was discharged.—*Med. Standard*, March, 1888.

Garaud on a Case of Ossification of the Diaphragm.—In the body of a patient dying of pulmonary congestion, when cutting away the attachments of the diaphragm, the author found a hard body imbedded in the central tendon, a little to the left of the centre. On further dissection it was found to be a flat bone of a trapezoid shape, two inches long by one and three quarters wide and a quarter of an inch thick. This bony plate was exactly below the pericardium. The author finds records of six similar cases.—*La Loire Médicale*, Feb. 15, 1888.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital.

VOL. V., No. 13. March 29, 1888. WHOLE No. 61.

CONTENTS.

	PAGE
Leading Article	149
Pathology	152
Therapeutics	154
Miscellaneous	158
Book Notices	160

LEADING ARTICLE.

Antipyrine.—This drug, first introduced to the profession in June, 1884, has had now an experience that entitles it to a place in the rank of really valuable therapeutic agents, and antipyrine will doubtless well sustain a more extended trial as an antipyretic and neurotic.

The chemical experiments undertaken to find a way to produce quinine artificially have led to the discovery of a number of substances, some of them belonging to the aromatic series of organic compounds, that possess to a remarkable degree the power of reducing hyperpyrexial temperatures. Ziemssen remarks suggestively (*Am. Handbook of General Treatment*): "It is interesting to note that most of the antipyretics belong chemically to the so-called aromatic group (derivatives of benzol), a group which at the same time yields many of our best antiseptics. Thus carbolic acid, salicylic acid, benzoic acid, kairine, antipyrine, and quinine, and other alkaloids of cinchona, are all members of this group. This fact tends to confirm a somewhat general belief that some, if not all, of our most efficient antipyretics owe this action to their antiseptic properties."

Knorr, of Munich, while thus experimenting for quinine, produced a new body from the coal-tar series—dimethyloxychinizine. This was a crystallizable, grayish-white powder, soluble in water and alcohol, and striking a claret-red color with perchloride of iron. The physiological action of the new alkaloid was first studied by Demme (*Fortschritte der Med.*, Oct. 15, and Nov. 1, 1884). Filehne, impressed with the antithermic possibilities of the drug, soon put them to practical test in the treatment of fever. His results were given to the world in the *Zeitsch. für klin. Med.*, Bd. vii. Filehne had seen little more than the antipyretic properties of the alkaloid, and it was hastily christened *antipyrine*. The profession at first was entirely absorbed in the antithermic powers of antipyrine, and it was a later interest that developed the fact, which had earlier been pointed out by Demme, that the drug acts by selection upon the nervous system.

It is claimed by Robin (*Bull. Acad. de Méd.*, Dec. 7, 1887) that the effect upon the nervous system depends upon the influence on its elementary nutrition, which he thinks is the prime effect of the drug. Germain Sée, April 1, 1886, reported to the French Academy his study of the action of antipyrine upon the nervous system of dogs. He showed that antipyrine enfeebled the receptivity and reflex excitability of the spinal cord; and that locally injected there was a diminution in general sensibility as well as a real analgesia in the member which received the injection. Giuseppe Cesari, of Modena, on administering two grains to rabbits, observed muscular twitchings, general tremors, and suspension of reflexes. One to two hours after, convulsions increasing in severity occurred, tonic spasms of the anterior limbs and clonic of the posterior. The convulsions were increased by the interrupted galvanic current, with retraction of the head upon the back. Death took place in five hours. Arduin, as well as Coppola, believes that the brain is influenced by the drug, since, when convulsions are produced by it, they are diminished in severity if the

brain is separated from the cord. Ringing in the ears is occasionally produced by therapeutic doses in man. Large doses in dogs have caused wide dilatation of the pupil.

The respiration in health is considerably quickened, but the type is unchanged (Pavlinoff). In fever, the rate of respiration falls with the temperature.

Antipyrine produces a fall of temperature in the lower animals proportionally to man. In fever, the administration of one to two grains every hour, up to four grains, causes a fall of from a decimal of a degree to two or three degrees Centigrade. Normal temperature is depressed somewhat less, proportionally. The antipyretic action is variously explained. Bettelheim, Auseroff, and Beyer (*Am. Jour. Med. Sc.*, April, 1886) have attributed it to an increased radiation of bodily heat consequent upon the vascular changes. Arduin thinks that the depression of temperature is due to an impression upon the thermogenic nerve centres.

Several observers have noted that the surface temperature rises while the internal falls, a fact in accordance with the vascular changes. Robin (*loc. cit.*) and many others have proven that antipyrine diminishes nitrogenous metamorphosis. The truth probably lies in the fact that the antithermic action is complex ; that the drug both diminishes heat production and increases heat dissipation, possibly also depressing the thermogenic centre, if there be one.

When mixed with blood, antipyrine does not cause a change of color or destruction of corpuscles, as does kairine, thallin, resorcin, and probably antifebrin (Germain Sée, *Bull. Méd.*, April 20, 1887). The effect upon the heart is to make the auricular contractions much more thorough than with normal blood, and the ventricular systole more complete and prolonged (Beyer). Arterial tension is at first slightly increased. The peripheric vessels dilate widely and rapidly with therapeutic doses. Opinions differ as to whether this vasomotor phenomenon is of central or peripheric origin. Advocates of the latter claim that similar changes will take place in an isolated limb, with hypodermic injection (Beyer, *loc. cit.*). Hénocque has shown the hemostatic properties of antipyrine locally applied in a five per cent. solution.

Antipyrine increases the flow of saliva, and is eliminated by it in small quantities. Nausea and vomiting not infrequently accompany the administration of therapeutic doses. Slight constipation has been noted as caused by the drug (Ogilvy, *Br. Med. Jour.*, Jan. 14, 1888).

The action of antipyrine upon the skin is generally well-marked. It causes more or less profuse sweating, according to dosage, from the relaxation of the cutaneous vessels. A rash resembling urticaria, or measles, is sometimes observed, especially in women (Germain Sée). This was most marked where a certain idiosyncrasy existed, where there was a "serious vasomotor disturbance" (Sturge). The urticaria develops very suddenly, and is accompanied or preceded by intense pruritus.

Antipyrine is eliminated by the urine. It can be found two hours after administration, and usually for thirty-six to forty-eight hours afterward. Robin found that the drug, both in health and in fever, diminished the quantity of the urine and the amount of solids, notably urea.

Two fatal cases are reported from the use of antipyrine (*Ther. Gaz.*, August, 1887). Several cases of poisoning, with recovery, are on record. Whitehouse (*N. Y. Med. Rec.*, Dec. 3, 1887), after the administration of seven and one half grains to a young girl, reports severe gastric pains, intense urticarious eruption and pruritus, and unconsciousness. The hypodermic injection of $\frac{1}{60}$ grain of atropia produced complete restoration. Oscar Jennings (*London Lancet*, Feb. 25, 1888), for eight days, administered thirty seven grains daily of antipyrine to a patient who had no adverse symptoms until the eighth day. Then she developed a catarrhal state of the oculo-nasal mucous membranes, urticaria, swelling of face and eyelids, icy cold sensations, depression of temperature. Belladonna was administered, and in a few days the symptoms had disappeared. Dr. Allen Sturge (*Br. Med. Jour.*, Feb. 4, 1888) had toxic symptoms follow four grains given for migraine. Five minutes after the dose was taken an "expanding sensation" was felt, rising from the stomach upwards. The eyes were suffused, tears began to flow, breathing became labored, and a violent cough set in. There was profuse sweat, urticaria, coppery taste, metallic smell, tinnitus aurium, pulse full and quick.

In five hours the patient was in his normal condition again.

Therapeutic doses have occasionally been followed by great nausea and vomiting, by loss of consciousness, or by cyanosis, dyspnœa, and collapse.

Dr. W. H. Porter (*N. Y. Med. Jour.*, July 30, 1887) presented to the New York Pathological Society the liver and kidney of a patient to whom large doses of antipyrine had been given, in which, as a result of the action of that drug, it was thought that extensive fatty and granular metamorphosis had taken place. Dr. Porter had noticed for some time that, in the bodies of patients who had been treated with antipyrine, there was very frequently fatty and granular metamorphosis of liver and kidneys. A curious idiosyncrasy noted by Daniel Bernouilli, of Basel (*Ther. Gaz.*, Feb. 15, 1888), was a quick rise of temperature following every dose.

The therapeutic application of antipyrine to nervous conditions is as an analgesic and tranquillizer, as an anti-spasmodic, and as an hypnotic. As a general analgesic, antipyrine was first advocated by Germain Sée, who predicted that it was destined to largely take the place of morphine. It relieves pain without especially influencing the pathological condition underlying it (Wilson, *Jour. Nerv. and Ment. Dis.*, Jan., 1888), as the pains of neuralgias, of gout, rheumatism, and tabes dorsalis, of tooth-ache, hepatic and nephritic colic, and of angina pectoris. On all neuralgias antipyrine exercises marked analgesic and tranquillizing powers and a certain amount of curative influence. In migraine, for which the alkaloid was first used by Dr. J. Blake White, of New York, and Unger, of Germany, the curative influence is admitted by all. According to Dr. Allan McLane Hamilton, it is in the angeio-spastic form that antipyrine is most effective,—a conclusion that the physiological action would suggest. Forsbook, who has reported its use in one hundred cases of migraine, has seen the drug sometimes produce a species of intoxication (*Lancet*, Dec. 10, 1886). In other forms of headache, antipyrine is generally effective also, except those from malarial infection and renal disease. In headaches of paroxysmal type, in pyrexial, neurasthenic, hyperæmic, hysterical, and in some forms of sympathetic headache, the drug is useful. In headache depending on intracranial organic lesion its use always mitigates pain, but a toleration is established (Mayer, *Med. Standard*, March, 1888). As a tranquillizer of maniacal excitement antipyrine does not do well; but in hysterical excitement it is effective (*Alien. and Neurol.*, July, 1887). The hypodermic use of antipyrine in fifty-per-cent solution, first suggested by Germain Sée, has been extensively adopted in France. Capitan advises that cocaine be added to the solution for injection. As an anti-spasmodic, antipyrine has been used in epilepsy, chorea, pertussis, and asthma. Lémoigne (*Gaz. Méd. de Paris*, Dec. 24, 1887) limits its use in epilepsy to the following classes of cases:

1. Cases where epileptic seizures are induced by menstruation.

2. Cases in which the paroxysms are induced by irritation of intestinal parasites.

3. Cases where attacks are attended by migraine. In these cases the author admits that antipyrine in doses of thirty grains a day is superior to potassium bromide.

The *Alienist and Neurologist* (July, 1887) believes that antipyrine will prove efficient in both grand mal and petit mal, evidently without regard to the etiology; that it both postpones and suppresses the paroxysms.

Légroux (*Rév. de Thérap.*, Jan. 15, 1888), impressed with a suggestion of Dujardin-Beaumetz of the sedative action exercised on reflexes by anti-thermic agents, experimented upon chorea with antipyrine. He found that fifteen grains in twenty-four hours cuts short the movements in from six to twenty-seven days.

As an hypnotic, antipyrine has been found not so sure as chloral, or so certain and prolonged as chloral and bromide. But it often acts well in insomnia, and in the insomnia of a restless, nervously exhausted patient. It is not successful as an hypnotic in maniacal excitement (*Alien. and Neurol.*, July, 1887).

Against hyperpyrexia, of whatever type except malarial fever, antipyrine is effective in greater or less degree. In typhoid fever the alkaloid has been very extensively tried all over the world. The method of Filehne, who first used the drug for fever, has been practically followed everywhere, viz.: 15 grains every half hour up to one drachms. Clément, of the Hôtel-Dieu, expresses the conclusions of most authorities when he says that he agrees with Liebermeister that it is best to reserve antipyretic drugs for those cases where bathing fails to reduce the temperature, or where it is inadmissible

for other reasons, such as hemorrhage (*Lyon Méd.*, Nov. 27, 1887). Pavey's rules for the administration of antipyrine in typhoid fever are: Temperature not above 103°. 10 grains every half hour; temperature 104°, 15½ grains every half hour, three doses; temperature 105° and above, 62 grains in four doses, one half hour interval. In surgical fever Verneuil advocates the use of antipyrine. In phthisis the drug has been found safe and efficient against the fever, at the same time relieving the annoying headache and other nervous symptoms depending on the fever.

While antipyrine has some resemblance to salicylic acid, yet it cannot take its place entirely in acute articular rheumatism. Fraenkel (*Deutsch. med. Wochenschr.*, No. 43, 1886) recommends antipyrine as the first remedy to be employed, abating the striking symptoms of pain and fever; but it does not prevent relapse nor exercise any specific action on the disease.

In obstetric practice antipyrine has been found valuable as a hemostatic in five-percent. solution, locally applied, and as an analgesic for after-pains (Milne, *N. Y. Med. Rec.*, Jan. 14, 1888).

In dysmenorrhœa of congestive or neuralgic type, the use of the drug has been most successful. As a uterine sedative it has been extensively used by Chouppe (*Brit. Med. Jour.*, Dec. 17, 1887).

In sea-sickness, Ossian Bonnet (*Bull. de l'Acad. de Méd.*, 1887) claims great virtue for antipyrine; and Cheatham (*N. Y. Med. Rec.*, Oct. 8, 1887) extols the power of the drug in hay-fever.

As a disinfectant antipyrine possesses undoubtedly positive powers. Hénocque has found a one-to-twenty solution effective against the development of micro-organisms. In diseases of children, antipyrine has been proven safe and effective, and has been used to meet the same indications as in the adult.

More extended experience may limit the sphere of usefulness of antipyrine still farther than has been yet indicated, but its value as a symptom-medicine against pain and fever cannot be doubted. Its disadvantages lie in the not infrequent "idiosyncrasies" to the drug which have been mentioned,—probably to be explained by the varying degrees of susceptibility of the nervous system in different individuals, and unfortunately never to be foreseen. Not the least of the merits of antipyrine is that, so far as is known, its continued use is not, as with morphine and chloral, attended by the danger of the formation of a vicious habit. ELIZABETH STOW BROWN, M.D.

PATHOLOGY.

Leucocythæmia Considered as the Cancer of the Blood.—Dr. L. Bard, of Lyons, points out the close similarity between leucocythæmia and malignant diseases of the more solid tissues. The growth of pathological tissue, *i. e.*, the excess of white blood-globules, their progressive development and multiplication, the freedom from any inflammatory process, the onset of a special cachexia, and the final fatal termination in spite of treatment, all remind the author that the process is malignant, and well deserves the name of cancer of the blood.

The author puts aside, as accessory, non-pathognomonic factors of the disease, the hypertrophy of the spleen, lymphatic ganglia, and occasionally the other hematopoietic organs, as the liver, marrow, closed follicles of the intestine, the thymus gland, and the supra-renal capsules.

He points out that the pathognomonic features of the disease are the increase in the number of small, young, truly embryonic leucocytes.

Malignancy, as the author says, is not the special attribute of any one tissue, but is common to all. The one essential character of the malignant process is the rapid proliferation and constant increase of the cells of the tissue attacked, and the accumulation of cells, young, embryonic, and arrested, as it were, in the first stages of their specific development. So in the blood, in leucocythæmia, the leucocytes (or cancer cells) are greatly increased in number (twenty-five or more times as numerous), while the small leucocytes (embryonal cells) actually swarm in the blood (sometimes eighty times as numerous as the leucocytes themselves). Leucocythæmia thus corresponds closely to our anatomical notions of malignant tumors. If the process does not give rise to a tumor, *i. e.*, a solid mass, it is because, in the tumor, the new formation conforms, in its essential features, to the original tissue. The blood, a fluid tissue, gives rise to tumors of the same nature.—*Lyon Médical*, Feb. 12, 1888.

Homan (G.) on the Import of Enlarged Venous Radicles in the Epigastrium.—Several years ago, during the physical examination of a considerable body of men, my attention was quite frequently called to instances in which distinct venous markings occurred in the epigastric region, and in the course of a re-examination of the same body of men recently concluded, the matter still more strongly attracted my attention.

These markings occurred in perhaps twenty per cent. of all the men examined, varying in degree from a few faint traces or twigs to numerous long branches tortuous or waved, approaching in character to varices, and in more severe cases arranged to the eye in the form of a segment of a circle, the convexity being upward. These distinctly marked vessels, streaming in diverging lines upward from a common margin near the lower border of the thorax, gave to the eye of fancy some resemblance to the boreal aurora, a section of sunrise or saintly aureole.

This peculiarity of appearance is explained by the arrangement of the vascular supply of the middle pectoral and upper epigastric regions. The internal mammary veins are the conduits by which the drainage of these parts is accomplished, the venous radicles descending from about the line of the nipples to the middle lower border of the thorax, where they suddenly and sharply turn inward and empty into the veins just mentioned two on each side, which pass upward inside the chest cavity a little exterior to the margin of the sternum, and, after uniting into a single trunk, emptying into the innominate veins on either side of the body.

The presence of these vessels to a marked degree in connection with cases of valvular disease of the heart first drew my attention to them as having an important clinical bearing, their anatomical relation and course giving to them peculiar significance as affording probably one of the earliest indications of obstructive lesion on the right side of the heart, and in the lungs, as well as intrathoracic plethora generally.

While in near relation with the heart and directly connected with it by the innominate veins and cavæ, the double turn made by the contents of these vessels in reaching the right auricle makes their peripheral terminals probably more sensitive, and the first to respond to any narrowing or obstruction in the passages of the heart, or pressure within the chest, than in any other vessels that appear on the surface of the body. And in this manner they may constitute, perhaps, the earliest objective symptom of the disorders suggested.

The blood delivered to the heart by these channels travels a route somewhat similar in profile to an elongated S, or "pot hook," both bends being abrupt and tending to weaken the force of the current, in addition to the impediment of gravitation. The fact that there are two veins to each artery favors the supposition that the former vessels are especially liable to obstruction and varicosity.

I am disposed to think that besides organic hindrances that may exist in the cavities and gateways of the heart, this symptom may be developed to some extent by enfeeblement of respiratory power, by gluttony and drink in habitually overdistending the stomach, and by general corpulence by which the chest within and without is weighed down by a burden of fat.—*St. Louis Courier of Med.*, March, 1888.

Stark (W. G.) on a Fatal Case of Intestinal Obstruction from Round Worms.—Lilly I——, æt. seven years, a pale, thin, sallow child, had for the past three years been greatly troubled with worms, often passing a large number after taking the usual vermifuges. General health had been good; active in habit and cheerful. Had been out the day before I was called in, playing in the snow in the intensely cold weather the first week in January. Came home complaining of feeling sick with pain in right iliac region. I was called in on the following day, 7th January, and found her feverish, vomiting and restless, with anxious expression and great pain on pressure over painful region. On her mother telling me that she had vomited, as well as passed per rectum, several large round worms, I prescribed santonin with calomel, and gave an alkaline fever mixture. The next day she was less feverish, had less pain, but the vomiting was incessant, with considerable prostration. I ordered bismuth and oxalate of cerium and brandy. The symptoms were worse on the 9th, the pain on pressure being greater and extending over a greater area. Repeated the santonin, and gave scale pepsine, which apparently allayed the vomiting for a while.

On the 10th her sufferings were so severe that I was obliged to give opium, with the effect of easing the pain and stopping the vomiting, but the tympanites increased. In the meantime injections had been given to keep the bowels open.

On 11th, all symptoms were worse ; pain ncessant, tympanites great, vomiting large quantities of green liquid. She died at 10 P.M., perforation evidently having taken place. No worms had passed for several days, but the vomiting being so troublesome it was impossible for her to retain medicine or nourishment.

Assisted by Dr. Storms, I made a hasty post mortem, which was all that could be obtained under the circumstances. On opening the abdomen, we found the bowels covered with pus, and the usual evidence of extensive inflammation. In the stomach we found two or three large round worms, but the duodenum and whole of the intestines down to the rectum were completely filled with large worms. At every incision I made I could draw out masses of worms twisted together in every way. I suppose out of some eight or ten incisions I took over one hundred worms, but this did not represent a tenth part of what the intestines evidently contained. Lack of time prevented me making a thorough examination, and finding the exact number present.—*Canada Lancet*, March, 1888.

Lecreux (R.). Four Biliary Calculi Eliminated through an Abscess in the Right Iliac Fossa.—A housewife, æt. twenty-eight, was admitted on Nov. 29th. Her general health was good, save for occasional attacks of dyspepsia. In November, 1886, she had a first attack of hepatic colic, followed by three others in January, March, and April, 1887, unaccompanied by jaundice. The last attack, the most violent, was followed by the appearance in the right iliac fossa of a swelling the size of a chestnut, which, however, did not give rise to any very severe symptoms. In November last, after a bout of very exhausting work and sharp purgation for the relief of obstinate constipation, the tumor rapidly increased in size, became painful, and obliged her to come to the hospital for treatment. On admission a diffuse, fluctuating swelling was found in the right iliac region, apparently just beneath the abdominal walls, and exceedingly painful and tender. The skin was not involved, and the leg was not drawn up, It was thought to be a case of perityphlitis or an abscess of the broad ligament. On December 1st the patient was anæsthetized, and a vaginal examination made without finding any thing abnormal. An incision was therefore made a finger's breadth below a line drawn from the umbilicus to the right anterior superior iliac spine, giving exit to about half a glass of sweet pus, together with four biliary calculi, about the size of dice. No bile escaped during or after the operation. The abscess cavity was washed out with sublimate solution, and a drainage tube inserted. The temperature, after the operation, oscillated between 38° and 39° C., but recovery took place without complications, and without the persistence of a fistula. The patient was discharged cured at the end of the month.—*Medical Press*, Feb. 8, 1888.

[Dr. Jno. Flintermann reports a similar case in the *American Lancet*, March, 1888. He had been called to attend a patient suffering with the usual symptoms of gallstone. An abscess occurred and the gallstone perforated the abdominal walls. A general peritonitis ensued, but the patient got well.]

THERAPEUTICS.

Hale (W. H. L.) on the Therapeutical Value of Bismuth Salicylate.—Some months since I called attention to the many advantages possessed by the bismuth salicylate in the treatment of summer diarrhœa in children ; since then I have been able to employ it successfully in other affections of the alimentary canal.

In an experience, extending over two years, with its use in the treatment of inflammatory affections of the gastro-intestinal tract, seldom has it failed to accomplish the desired result and permanently cure the disease.

In severe cases of diarrhœa occurring in phthisical patients I have effected diminution in the number of stools by half-drachm doses of the drug at intervals of two hours, reducing the amount of the dose on the amelioration of the symptoms.

In cholera morbus, after the cause has been removed, this agent will soon reduce the existing inflammation and induce a cessation of the morbid action.

In dysentery, acute in character and of the sporadic variety, it has proved effica-

cious when full medicinal doses have been administered, allaying the disorder with great rapidity.

The diarrhœa accompanying enteric fever, especially in children, I have been able to control by its use, when other well-known remedies for this disorder had failed. If impossible to administer by the mouth, an enema may be employed, but, in that case, the amount should be double that given by the mouth; and it should always have a small amount of opium administered with it.

In dyspepsia, with acid eructations and pyrosis, with a feeling of heaviness at the stomach after the ingestion of food, bismuth salicylate, in combination with a simple bitters, soon tones up the organ and relieves the disorders.

Recently, Dr. James Ware, of Lake Charles, La., communicated to me the following cases in which he had found the preparation useful:

1st. Female, æt. forty-five; dysentery. At end of five days of treatment with opium and so on, I gave:

℞ Bismuthi salicyl. . . . . gr. c.
Bismuthi subnit. . . . . gr. c. M.
Ft. pulv. No. vj. div.

Gave one powder every three hours. The woman was entirely relieved in twelve hours.

2d. Female, æt. twenty-three; dysentery. Gave salicylate as above, also by enema thus:

℞ Bismuthi salicyl. . . . gr. cc.
Glycerinæ . . . . . f ʒ j.
Aquæ . . . . . f ʒ vj. M.

Sig.—f ʒ, in three ounces of tepid water, after each stool.

Woman was well in forty-eight hours.

3d. Child, æt. three; never fully recovered from an attack of cholera infantum last summer. Relieved by salicylate in eight-grain doses.

4th. Male, æt. twenty-five; periodical fermentation of contents of bowels every ten or twelve days for a year. Relieved now at the beginning of every attack, by fifteen grains each of the bismuth salicylate and subnitrate.

5th. Female, æt. twenty; pruritus vulvæ. Suffered terribly for several days. Used corrosive sublimate, carbolic acid, and other remedies with no benefit; then employed:

℞ Bismuthi salicyl. . . . . gr. c.
Aquæ . . . . . f ʒ iv.

As a vaginal injection; relief instantly.

6th. Female, æt. fifty-six. Fermentation of contents of stomach and bowels every ten, twenty, or thirty days for twenty years, accompanied with violent pain and frequent discharges of acid mucus. Relief generally came in from thirty to seventy-two hours. In the midst of an attack I gave ten grains each of salicylate and subnitrate, with immediate relief. She has taken this amount night and morning for thirty days, with no return of the disease.

The preparation of this drug I have used is a pure white, very flocculent, and light material.

In beginning the treatment of any inflammatory affection of the alimentary canal, full and decided doses should be administered, and subsequently, when decrease in the severity of the symptoms takes place, the amount may be lessened. In severe cases occurring in children I never commence treatment with a dose less than five to eight grains.

The formula I prefer in cholera infantum and many other diarrhœal disorders in children is the following:

℞ Bismuthi salicyl. . . . 3 ij.
Tr. capsici . . . . . gtt. xij.
Spts. ammon. aromat. . f ʒ iss.
Pulv. acaciæ . . . . 3 ij.
Aq. cinnamomi, q. s. ad. f ℥ ij. M.

Sig.—Teaspoonful every two hours, for a child from three months to one year of age.

In the adult I prefer to use the preparation in powder, or combined with some other astringents, as tannic acid, acetate of lead, etc. With the bismuth salicylate it is possible, in many instances, to entirely dispense with an opiate, and this I always endeavor to do if possible.

The beneficial action of this drug is undoubtedly due to the antiseptic power of the salicylic acid as much as the astringent properties of the bismuth.

In many cases of vomiting it will control it if given in five-grain doses, also in pregnant women the vomiting may in many instances soon yield to the action of this preparation, and its return to any great extent will be prevented by its continuance in small and frequently repeated doses.—*The Polyclinic*, March, 1888.

Krafft-Ebing on Methylal in Delirium Tremens.—An interesting note on the value of methylal, the new hypnotic, has been contributed to the *Therapeutishe Monatshefte* (February). The author employed an aqueous solution of the strength

of 1 in 10 as an hypodermic injection; each injection contained 1⅛ grains of methylal, and in this strength produced only slight and transient smarting. Thus administered it was found that the drug only produced its effect after an interval of about two hours; if sleep was not produced after between two and three hours, the injection was repeated. Twenty-one persons were thus treated, about half the number being slight cases: in 6 instances sleep was induced by 1 injection, in 10 by from 2 to 4, in 3 by from 5 to 8, and in 2 by from 10 to 20; deep, physiological, refreshing sleep, which sometimes lasted twenty hours, was then obtained; in other cases the patient slept for two or three hours to wake again delirious, but the treatment being persevered with, the prolonged so-called critical sleep always ensued. The author considers methylal to be the best sedative and hypnotic in delirium tremens which he has ever used; it has no depressing action on the heart, but rather the contrary, and it is followed by no unpleasant after-effects. He considers that it is likely to be useful in insomnia and restlessness due to inanition or cerebral anæmia, but that it is contra-indicated in cases where there is cerebral hyperæmia. The very small doses which were found to be adequate give special importance to this communication.—*Br. Med. Jour.*, March 3, 1888.

Johnson (J. B.) on Thymus Vulgaris in the Treatment of Whooping-Cough.—Those who have never used common thyme in the treatment of whooping-cough may smile when I say that my experience in its use has encouraged me to such an extent as to say, that of all remedies I have used for the alleviation of this disease a decoction of common thyme has given the greatest satisfaction. The simplicity of its preparation, its mildness of action, and peculiar sedative and antispasmodic effect in controlling the violence of the paroxysms of cough is most astonishing. The little sufferers take the decoction without the slightest hesitation; and the benefit which they derive from it is as prompt as it is remarkable. It reduces the paroxysmal character of the cough, and renders the disease milder in its force and shorter in its duration. It diminishes in a peculiar manner the inflammatory condition of the mucous membrane of the glottis and the air-tubes, which in this disease invites reflex spasm. In the accomplishment of this object the danger and liability to complication is very much lessened, and the disease rendered comparatively harmless through a marked diminution of the tracheo-bronchitis, which is always to a greater or less extent its constant attendant during the two stages of the disease.

In my treatment of this disease I require my little patients to wear flannel next to the skin, and be kept in a room well ventilated, the temperature of which should be kept at night, as well as during the day, at about sixty-five degrees in the winter season. They are not allowed to leave this room until restored to health. I direct an ounce of common thyme to be put into one pint and a half of hot water, and boiled down to one pint, then strained and sweetened well with either honey or sugar. In this manner it is made pleasant to the child. To infants I order one or two teaspoonfuls to be given regularly every hour or two, and to children a tablespoonful every hour or two during the continuance of the disease. Should auscultation reveal much inflammatory action of the bronchial tubes or lungs, I usually add two drachms each of iodide of potassium and powdered chlorate of potash to each pint of the sweetened decoction, and direct it to be used in the same manner as the simple decoction. Under the influence of this treatment my little patients pass through attacks of whooping-cough with astonishing ease and comfort, and only on rare occasions have I been compelled to use any other medicines. This treatment is greatly aided by a prudent attention to diet, which should consist of milk and farinaceous foods.—*Med. and Surg. Reporter*, March 17, 1888.

Iodism.—The subject of iódism has been studied in a thesis[1] by Dr. Elizabeth Bradley, of New York, undertaken at the instance of Professor Fournier. The writer has collected and analyzed a large number of published cases, proving that the effects known under this head are due to the absorption of free iodine, these effects being widely produced in the organism. A susceptibility to the action of iodine is fully recognized, and it is pointed out that in cases of renal or cardiac disease, or of morbid irritability of the nervous system, the physiological action of iodine may be increased, and symptoms of intoxication

[1] L'Iodisme. Paris: Steinheil, 1887.

induced. These symptoms point to derangement of every organic function. They may ensue on a long course of medication, or appear at the commencement of the treatment, and may develop gradually or suddenly. The most constant of these phenomena is an increased rise of the pulse, which at the same time becomes weak and compressible; but the temperature is not raised, rather depressed. The disturbance of circulation is evidenced by the occurrence of œdema, which in slight cases may be limited to the eyelids, but in severe cases may involve other parts,—as the glottis, lungs, and brain. The blood itself is altered, and there may be produced albuminuria or hæmaturia, with more or less suppression of urine. The nerve symptoms are mostly those which are referable either to cerebral anæmia or cerebral congestion. They sometimes take on the form of uræmia, at other times of melancholia and general paralysis. The pulmonary symptoms may be those due to the derangement of circulation, such as bronchitis, or œdema with hæmoptysis, or there may be dyspnœa independent of mechanical difficulties. On the side of the alimentary system, anæroxia or boulimia, nausea, vomiting, pain (gastric and intestinal), diarrhœa, and constipation are conditions which have all been met with in various cases. The skin may be affected, as evidenced in various iodide rashes, which may take on the type of erythema, urticaria, bullous or papular eruptions, or purpura. Lastly, the joints may be attacked and become swollen and painful.—*Lancet*, March 10, 1888.

Ward (E. B.) on the Nitrite of Amyl in Dyspnœa.—The writer had a patient with Bright's disease, who suffered most agonizing paroxysms of dyspnœa, notwithstanding the use of ordinary measures. There was no asthma whatever. On the recurrence of an attack the writer gave 3 drops of nitrite of amyl in a teaspoonful of brandy without expecting much result. The result was simply miraculous and almost instantaneous. From a sense of impending suffocation the patient began to breathe perfectly freely in less than five minutes. This relief lasted for upwards of twelve hours, when the same quantity was repeated on the recurrence of another attack, with the same result, and without increasing the dose. The nitrite was given on every recurring attack until the attacks finally disappeared, and for several days the patient has had no dyspnœa whatever. The original disease, however, was unaffected by the nitrite.—*Jour. Am. Med. Ass'n*, March 10, 1888.

Acephenetidin as an Apyretic.—Dr. J. Georgievski published in the *Vrach* an account of a series of observations on acephenetidin, a substance which appears to act as an apyretic, and to possess several advantages over other drugs which are used for this purpose. Previous observers state that ten-grain doses have no effect on healthy persons, but that from five to ten grains produce a reduction of 3° or 4° F. in persons with fever, also that no unpleasant symptoms are caused. Acephenetidin occurs as a crystalline powder of a grayish color. Its formula is $C_{10}H_{13}NO_2$, or $C_6H_4 \begin{cases} C_2H_5O \\ NH\,(C_2H_3O) \end{cases}$; being, in fact, benzol C_6H_6, in which two atoms of hydrogen are replaced by compound radicals. It has no taste or smell, and is at the temperature of the body almost insoluble in water, acids, alkalies, gastric juice, and pancreatic juice. In alcohol it dissolves in the proportion of 1 in 20. It arrests the alcoholic fermentation of grape sugar. In order to test the action of the drug on the healthy body, Dr. Georgievski took thirty grains a day in three doses of ten grains each, separated by intervals of an hour. This was about a quarter of a grain per pound of body weight. The only sensation produced was a slight feeling comparable to the beginning of alcoholic intoxication. No reduction of temperature was produced, though the drug was taken for some days. The color of the urine was unchanged, but when a few drops of solution of chloride of iron were added to it, it gave a reddish-brown or black color. Sulphate of copper gave a somewhat similar reaction. The urine was affected in half an hour after taking the dose, the reaction being much more distinct in two hours, remaining very strong till the fourth hour, after which it gradually became weaker, but did not entirely disappear even in the course of twelve hours. Observations were made on thirty febrile patients, including cases of phthisis, typhoid, typhus, acute rheumatism, croupous pneumonia, erysipelas of the face, quinsy, diphtheria, and pleurisy. A single dose of from three to five grains was sufficient to lower the temperature. Usually in half an hour it had

gone down nearly 1°. This reduction continued, the lowest point being reached in three or four hours after the dose had been taken. The subsequent rise which then began was very gradual, the original height not being reached for five or six hours more. As a rule, a three-grain dose reduced the temperature 1.8°, and a five-grain dose 3.6°. It appeared to be more advantageous to give five or ten grains all at once than in two or three divided doses at an hour's interval. The nature of the disease seemed to have a decided influence on the effect of the medicine; thus in phthisis, typhoid, and pleurisy, in which affections the temperature curve generally shows great variations, acephenetidin produced a greater and more prolonged reduction than in the diseases, like pneumonia and typhus, in which there is a less variable temperature. When complications occurred, occasioning a rise of temperature, the action of the acephenetidin was weakened and large doses were required; thus during the course of acute rheumatism, when fresh joints were being attacked, the drug had but little effect. Like other antipyretics, acephenetidin appears to have a powerful analgesic action. Dr. Georgievski gave it with most satisfactory results in cases of cephalalgia, neuralgia of the fifth, and migraine. The dose in these cases was ten grains, with directions to repeat it or to take five grains in an hour's time, if necessary.—*Lancet*, March 10, 1888.

MISCELLANEOUS.

Briggs (W.) on Renal Calculus with Suppression of Urine for Fifteen Days; Operation; Death; Autopsy.—The patient, a man of thirty-three, for several years had had attacks of nephritic colic, confined entirely to the right side, and also gouty rheumatism. After each of the attacks of renal colic he had passed small elongated uric acid calculi, which were generally about the diameter of a knitting-needle, and from one quarter to three quarters of an inch in length. He had had several periods of suppression, more or less complete, but none had lasted for any considerable length of time. As stated, the present suppression had set in after an attack of renal colic thirteen days previously (viz., Jan. 10th), and had persisted up to that moment. During this period not ten minims of urine had been passed altogether.

There was a constant feeling of dulness and uneasiness throughout the entire lumbar region, but more marked in the left. There was no urinary odor perceptible about his body, but on bringing the nose close to his mouth, a faint but marked odor was found on his breath. Examination of the person showed no marked tumefaction on either side, though possibly the left side may have been slightly swollen. Percussion developed marked dulness over the left kidney, but no similar symptom on the right. A careful sounding of the bladder detected no stone, nor did the catheter bring away any urine. Notwithstanding all this, there were absolutely no indications of uræmia.

The writer concluded that the case was one wherein the tubules of the cortical portion and the calices of the right kidney were impacted with uric acid calculi, and that the left kidney was destroyed, or at least functionless.

The next morning (Jan. 24th), at 9:30 o'clock, he was in much the same condition as on the first visit, no urine having passed in the interim. During the previous night the patient had had an attack of renal colic, which had occasioned much suffering.

The operator desired to make an exploratory incision through the right loin, thus avoiding the peritoneum. The consultants, however, opposed this, and, after deliberation and discussion of the relative merits of each procedure, laparotomy was determined upon.

On entering the peritoneal cavity, the right kidney was found literally encrusted and impacted with calculous matter. The left kidney was found enlarged to the size of the head of a fœtus at term, also studded and impacted with calculi—manifestly entirely functionless. Here, evidently, further surgery could avail nothing, but, before withdrawing his hand, the operator gently manipulated both kidneys.

The further progress of the case was, at first, extremely satisfactory, as no marked reaction set in, and urine was passed quite freely. The next day hiccough set in, but was controlled by ether. The temperature became somewhat elevated, the pulse very fast, and the patient died forty-eight hours after the operation.

Upon the autopsy the right kidney was

found impacted—the cortex and calices with an immense number of uric acid calculi, varying in size from a grain of wheat, or smaller, up to that of a white bean. In the pelvis of the kidney one calculus was found of about the size of a hickory nut. The right ureter was also found impacted with calculi. The left kidney was much enlarged, and contained numerous cysts, into which the end of the finger could be placed, and which had evidently contained calculi. Inserting the finger into any of these, calculi could be felt through the walls, any and everywhere throughout the kidney.

Sixty drachms of the urine passed before death were found to contain 56.6 grains of uric acid.—*St. Louis Med. and Surg. Jour.*, March, 1888.

Ashhurst (J.) on Synchronous Triple Amputation.—As a result of being run over by a train on the railroad, a man about twenty years of age had suffered the following injuries: crush of the right leg, which was lacerated above the knee; avulsion of the leg at lower third; crush of right hand and wrist; scalp lacerations, and compound fracture of the skull in frontal region, impacted; with laceration, followed by deep sloughing on buttock. He was immediately brought into the hospital of the University of Pennsylvania, which was near the scene of the accident, when his general condition was found to be very good; temperature, 99°. On the same day, November 28, 1887, primary synchronous amputation was performed of the three injured members: the right thigh by anterior and posterior flaps, using Esmarch tubes to prevent hemorrhage; the left leg was amputated by a modification of Sédilot's method; and the right forearm was removed at the lower third. No irrigation was used. Antiseptic dressings were applied. The fracture of the skull and scalp laceration were treated as usual. At the conclusion of the operation the patient's temperature was 98°. The reporter particularly insisted upon the danger of allowing the patient's temperature to be lowered by exposure of the body during operation, and for this reason deprecated the use of wet towels and irrigation as ordinarily used in antiseptic surgery, and which often turn the scale against the patient. The man made a rapid recovery without any unfavorable symptoms. This is the only case on record of successful triple synchronous major amputation. He reported a second case in a man twenty-one years of age, in which both legs and the right forearm had been amputated for similar injury, but which had proved fatal on the tenth day, death being due to alcoholism. Out of fifteen double synchronous amputations, he reported five recoveries, with ten deaths. Of two triple synchronous amputations the one presented alone recovered.—*Boston Med. and Surg. Jour.*, March 15, 1888.

Harris (W. J.) on Sponge-Dressing in the Treatment of Abscess.—For several years I have used a sponge-dressing for ordinary abscesses, with great satisfaction.

After lancing the abscess freely and pressing out the contents, I syringe well with a solution of bichloride (1 to 1,000), then apply a sponge large enough to cover the cavity, wet with the same solution. A bandage comfortably tight is then applied over the sponge. The sponge is taken off every few hours, washed out in very hot water, wet with the same solution and re-applied. The sponge absorbs the discharge as long as it flows, and as it dies out keeps up a steady pressure over the cavity, causing the abscess to heal by first intention. It is antiseptic, comfortable, and easily applied. Only a few weeks ago I opened a large abscess on the thigh, dressed it as above, and in eight days it was entirely well. This dressing can be applied to any location where a bandage can be used, and with less trouble to patient and physician than any other known to me, and I think with better results.—*Practice*, Feb., 1888.

Slow Surgery.—In pre-anæsthetic days, a very great, if not indeed the principal of a surgeon's qualifications was the ability to perform operations with the utmost rapidity. We still hear it told with pride how Mr. So-and-so of this or that hospital used to "whip off a leg" under a minute, and so on. We have it on the authority of Mr. Christopher Heath, that nowadays the tendency is rather in the opposite direction. Free from the agonized cries and struggles of his unhappy patient, who now lies peacefully quiescent while his intestines are being manipulated or his kidneys removed, the surgeon takes his time, and often, we are told, without sufficient regard to the injury inflicted on the patient by exposure and loss of blood. We commend the remark to the considera-

tion of operating surgeons, who would do well from time to time to imagine themselves operating without an anæsthetic.—*Medical Press*, March 7, 1888.

BOOK NOTICES.

Diseases of the Heart and Circulation in Infancy and Adolescence. By John M. Keating, M.D., etc., and William A. Edwards, M.D., etc. Illustrated with photograph and wood engravings. Pp. 215. Price $1.50. Philadelphia, Pa.: P. Blakiston, Son, & Co.

In this little work the authors have made a very valuable addition to medical literature. We believe that the possibility of the development of cardiac lesions in very young patients is too often overlooked. The concise account of the congenital defects of the heart will be especially acceptable to many.

Like all other books the present one has its defects. Although the existence of relative incompetence of the tricuspid and aortic valves from the dilatation of their respective orifices without valvular lesion is spoken of, nothing is said about the corresponding affection of the mitral valve. It is, in our opinion, the passing away of the dilatation and consequent return of the competency of the valves that explains the disappearance of many mitral regurgitant murmurs.

In speaking of endocarditis the authors correctly call attention to the fact that the symptoms may be very indefinite. It is probable that the same is true of the physical signs, *i. e.*, that the absence of physical signs of an endocarditis, in a disease in which that form of inflammation is known to occur, is not absolute proof that it has not occurred and that it may not, sooner or later, give rise to serious trouble.

The necessity of care in the use of digitalis in cases of valvular defect is properly insisted upon, but in recommending its use in acute endo- and peri-carditis the indications are not given as distinctly as they should be. In our opinion it requires much nicer judgment to regulate its use in acute inflammatory and degenerative lesions than in more chronic conditions.

The general mention of the use of mineral springs in the treatment of valvular diseases on page 141, as it stands, conveys no information whatever, as the indications to be met are not even hinted at. Sparteine and caffeine certainly merit more than a mere mention. A concentrated solution of sulphate of magnesia is spoken of as of use in reducing dropsy, but not as a measure for the relief of a dilated right heart, the indication for which it was originally proposed and which we have found it to meet satisfactorily on more than one occasion. The suggestion of jaborandi and pilocarpine as remedies to be used to relieve cardiac dropsy strikes us as peculiarly unhappy, as the known depressant action of these drugs upon the heart make them peculiarly dangerous in just this condition.

In discussing reduplications of the cardiac sounds the statement is made that reduplication of the second sound "usually gives evidence of some cardiac disorder." Mention is made of the fact that reduplication of this sound may occur independent of any appreciable disease, but this is not the whole truth, as it occurs often as a perfectly physiological phenomenon at the end of inspiration and beginning of expiration. The present writer has found it so frequently when there was no question of any cardiac lesion as to reject it entirely as of any diagnostic value *unless* it continues constant through stages of the respiratory act.

In the article on chlorosis nothing is said of the dilatation of the heart which sometimes occurs in this malady. The imperfect development of the heart and aorta found by Virchow to exist in some cases is mentioned. It is of interest to recall that in several cases of cerebral apoplexy, occurring in young subjects, reported to the New York Pathological Society, this same condition was found, the inference being that the high tension under which the blood of necessity circulated, in order to supply the body, in a set of vessels abnormally small, was the cause of the rupture of a cerebral artery.

The chapter on angina pectoris hardly belongs in this book. The unqualified recommendation of morphia in this malady recalls a recent case of the writer's in which the morphia habit almost rendered incurable a case which subsequently proved capable of an almost complete cure. This chapter should be omitted or improved in the next edition.

The book is written confessedly as a supplement to other treatises on diseases of the heart. It has been impossible not to include much of the experience gained in examination of the adult with that which is properly included under the title of the book. If the lessons it teaches should gain wide currency among the profession, the number of cardiac cases whose origin, as they present themselves in advanced stages, is often so obscure would become less, and the patients would gain materially from an early knowledge of their physical defects and consequent adaptation of their mode of life. We wish the book every success, and the speedy appearance of an amplified and, in certain particulars, corrected edition. R. VAN SANTVOORD.

Obstetric Synopsis. By John S. Stewart, M.D., etc. Illustrated. Pp. 202. Philadelphia: F. A. Davis, publisher, 1888.

This little work, as is implied in its title, is a condensed resumé of the essentials of obstetric practice. Compiled from the works of standard authorities on the subject of which it treats, avoiding all discussion of most points of theory, and stating only those principles of practice which are well established, it moreover presents to the reader many valuable suggestions as to those minor details in the management of obstetric cases which are often entirely ignored or made the subjects of glittering generalities by authors of exhaustive obstetric treatises. Important points are briefly stated, in many instances only to a degree sufficient to induce the student to study the subject in detail by reference to standard authors, or to bring to the recollection of the practitioner matters once well known, but often crowded into obscure corners of his mind by others of greater temporary importance. The work is above criticism as regards its subject-matter, which has been condensed and arranged by the author in an admirable manner. He has also embodied in an appendix the uniform Obstetric Nomenclature adopted at the recent meeting of the International Medical Congress.

J. S. HAWLEY, M.D.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital.

VOL. V., NO. 14. April 5, 1888. WHOLE NO. 62.

CONTENTS.

	PAGE
Leading Article	161
Therapeutics	162
Medicine	165
Miscellaneous	169

LEADING ARTICLE.

Haya Poison — A New Local Anæsthetic (?).—So much uncertainty enshrouds this recently studied drug, that a healthy skepticism in regard to it is the best attitude to maintain at present. All that is actually known about it is that it is used by some tribes of African negroes as an arrow-poison. Great differences of opinion exist as to the exact nature of the product. Lewin is convinced that it is a vegetable extract, prepared from an African tree, known botanically as the Erythrophlœum judiciale, from which certain African tribes derive their ordeal poison. Liebreich, on the other hand, thinks the poisonous ingredient is derived from a serpent, the naja hayé, or spectacle snake.

It is certainly rather discouraging not to know at the outset whether we are dealing with an animal or a vegetable preparation.

Lewin, Goldschmidt, and others assert that this poison contains an alkaloid which has definite physiological effects. When touched to the tongue, it causes a numbness and weakness of the organ. Given hypodermically to dogs and cats, it produces salivation; in cats, running at the nose and sneezing; in pigeons and other animals capable of the act, vomiting and often diarrhœa. In frogs it has been seen to slow the heart from thirty to eight beats per minute. In dogs and other animals respiration becomes arhythmical, rapid, and signs of dyspnœa and extreme languor develop. General sensibility seems to be progressively lowered, and when injected hypodermically, like cocaine, deep incisions appear to cause no pain. Motor paralysis, which is progressive, but interrupted by convulsions (tonic), follows large doses, but death takes place quietly, with extreme relaxation.

A $\frac{1}{10}$-per-cent. solution of the alkaloid, dropped in the eye, causes, according to Lewin and Goldschmidt, some local irritation, lasting a few minutes, and in fifteen to twenty minutes, an anæsthesia of the cornea, which lasts from eight to twenty-four hours. The pupil contracts, and the cornea becomes more or less cloudy. The deeper structures of the eye, as the iris, are not anæsthetized; accommodation and intra-ocular pressure are unaffected.

The advocates of this new drug assert its usefulness as a substitute for cocaine in local anæsthesia, and claim to have used it successfully in rendering the extraction of foreign bodies from the eye and slitting up the lachrymal canal painless operations. They have also used it in the extirpation of diseased glands. Several experimenters deny the truth of the above-mentioned physiological effects. Liebreich says the drug is a dangerous cardiac poison, and its anæsthetic properties are so uncertain, and its irritant action so extreme, that it does not deserve to be mentioned in the same breath with cocaine.

Karewski has employed it a good deal in surgical operations, and says that he was never able to induce complete anæsthesia with it, and that to the local anæmia which it produces can be attributed much of its action. He says violent and long-continued pain often follows its insertion. He found that a parenchymatous injection gave permanent relief in some cases of neuralgia—but almost any irritant will do that.

The most recent reports on the drug are by Tweedy,[1] and are certainly not reassuring.

He writes in substance as follows:

"During the last fortnight I have made many trials with solutions of the hydrochlorate of this drug on the human eye, but have failed to observe any decided anæsthetic effect. My first trials were made with a 0.5-per-cent. solution; but this produced very severe pain and irritation, accompanied with ciliary injection lasting from six to forty-eight hours. A 0.25-per-cent. solution produced only a degree less pain and irritation, without discoverable anæsthesia. A still weaker solution of 0.125 per cent., or 1 in 800, was negative as regards anæsthesia. After many trials with a solution of this strength I have been unable to obtain any appreciable anæsthetic effect. The immediate effect is severe smarting, lasting from ten to thirty minutes; and at any time from ten minutes to twelve hours after the application a minute drop of a solution of nitrate of silver or of carbolic acid, applied to the conjunctiva, produced as much smarting in the eye to which the erythrophlœine had been applied as in the other eye. I would even say that in my own case the smarting lasted longer in the eye to which erythrophlœine had been applied. In other respects the effect of the application is very disagreeable; the sight is very much blurred for many hours, so that every thing appears as if enveloped in a dense pea-soup fog; and around any artificial light there is a pronounced circular halo, with the red rays outwards. The halo is not associated with increased tension, but is probably due to disturbance of the corneal epithelium, which is obviously dulled. I would add that so far from erythrophlœine producing contraction of the pupil, as alleged in your notice, in all cases I watched there was a wide though not complete dilatation.

"Mr. E. T. Collins, the senior house surgeon at the Moorfields Ophthalmic Hospital, has also made independent observations at my suggestion, and has obtained results substantially the same as mine."

Panas, before the Académie de Médecine, March 6, 1888, as a result of his experiences with the drug, concludes that it is incomparably inferior to cocaine as an anæsthetic, and besides has irritant effects which detract much from the little usefulness it otherwise would have.

It is thus easy to conclude that we must wait the results of more painstaking investigation and more temperate discussion of the drug before we accord it even serious consideration.

[1] *Lancet*, Feb. 4, 1888.

THERAPEUTICS.

Braddon (W. L.) on Oil of Peppermint as an Antiseptic, and as a Remedy in Phthisis and Diphtheria.—The author, incited by the results of the investigations of Koch, who found that the oil of peppermint, in the proportion of 1 to 300,000 parts, arrested the development of the spores of carbon, has studied, in the laboratory, the antiseptic powers of this oil as compared with antiseptics at present in use, with the following results: To prevent the putrefaction of organic substances, he finds it more efficacious than carbolic acid, iodine, iodoform, or corrosive sublimate, a piece of fresh meat remaining sweet for seven months when wrapped up in gauze impregnated with a 1 to 1,000 solution of oil of peppermint in oliver oil.

Among the cases in which it has been the only antiseptic employed by the author, have been one of resection of tuberculous knee-joint (this case healed without any rise of temperature or any drop of pus; at six weeks from the operation the union was perfectly solid, and the patient has, since the eighth week, walked upon it without any other support); a removal of a large sebaceous cyst from the neck, not a single drop of pus being found, and healing being complete in four days by primary adhesion; an operation for strangulated hernia, after which no drop of suppuration occurred; and several minor operations, including a case in which many openings were made to relieve suppuration under the deep fasciæ of the whole of the forearm after a severe fall, and in which three six-inch-long drainage tubes were inserted; this case healed quickly without rise of temperature or any offensive character in the pus. For minor operations a preparation of olive oil, containing one drop of peppermint in an ounce, to soak the lint, is all that is required. He has also used a gauze prepared like eucalyptus gauze, and containing one part in 1,000, with great satisfaction.—*Lancet*, March 17, 1888.

Crandall (J. B.) on Cholera-Germs Destroyed by Ammoniacal Gases.—One singular feature of an epidemic of cholera which raged at Fort Dodge, Kansas, in the summer and autumn of 1867, is worthy the serious reflection of scientists, as it may lead to as valuable results as did the discovery of vaccination. Troop "B," 7th U. S. Cavalry, was exempt from the cholera, while the infantry, the quartermaster's employés, the civilians, as well as the officers, and those living on ranches for a radius of seventy-five miles about the fort, were brought in for treatment. The fact that the cavalry troop was exempt from disease was not attributable to the choice of location of ground, for it was on the same level with the infantry quarters and not more than a few hundred feet distant.

The true explanation is believed to be as follows: At the time when the cholera epidemic prevailed the post was not completed, and the men slept in a stone stable with their horses; and it seems reasonable to believe that the cholera-germ was neutralized or rendered inert by the action of the ammoniacal gas arising from the decomposed urine of the horses. And practical benefit might be obtained from this experience if, in case of future cholera epidemic, we were to adopt the customs of the Arabs in this respect, or to spray our homes liberally and often with spirits of ammonia, in order to destroy or prevent the propagation of the deadly cholera-germ.—*Med. and Surg. Reporter*, March 17, 1888.

Knaggs (H. V.) on Sulphur in Diphtheria.—Six years ago the author began to use sulphur as a remedy for diphtheria. During this period of time seventy-five cases have been treated solely by this drug. Complications and sequelæ also were but rarely noticed.

The author has, however, come to the conclusion from practical observations that the most uniform results are to be obtained by the use of small doses given at frequent intervals.

For preparing the sulphur mixture glycerine will certainly be found the most satisfactory body to use. The formula used by preference is as follows:

Precipitated sulphur (pure)	ʒ iss.
Chocolate powder	ʒ i.
Cinnamon-water (concentrated 1 in 40),	f ʒ i.
Glycerine to make	℥ iii.

Mix the powders together in a mortar, then gradually add the glycerine, with constant trituration, and lastly the cinnamon-water. If kept in tightly corked, sealed, or stoppered bottles, this preparation will keep well for a very long time. It of course requires shaking before use. The mixture is remarkably palatable, and is readily taken both by children and adults. Each drachm contains about three grains.

SIG.—½ to 1 teaspoonful to be taken every hour or oftener. The dose should vary according to the age of the patient. The mixture ought to be continued for at least five days, but at less frequent intervals after the severity of the symptoms has abated. —*Therap. Gaz.*, March, 1888.

Woods (H.) on Hallucinations due to the Administration of Sodium Salicylate.—In the *Maryland Medical Journal* for February 25, 1888, the author narrates three cases of his own, and refers to others where, after the administration of 25-grain doses of sodium salicylate, hallucinations of sight developed, and persisted in some instances until the drug was stopped. The visions, as a rule, were not terrifying, and could be shut out by closing the eyes. Mania and delirium, in the cases reported, never occurred. In the author's cases the salicylate was employed in ophthalmic patients, and instillations of atropia were simultaneously employed. Were his the only instances reported one might well doubt whether the salicylate or the mydriatic caused the sensory perversion; but he cites instances where similar phenomena followed the use of the drug in rheumatic patients; so it must be conceded that the salicylates, under certain circumstances, do have this peculiar action. A peculiar state of the visual tract must be present, predisposing it to this perversion, and it must be of infrequent occurrence as very few cases of it have been reported.

Jenkins (F. L.) on Remarkable Effects of Quinine.—A man complaining of a "*stitch*" in the side was ordered Dover's powder and quinine sulphate together, with a purgative. During that day and that night he took 15 grains each of the quinine and Dover's powder. Next day I called and found him free from pain; but he said: "Doctor, you should not have given me quinine, because it always goes to my weakest parts." Upon inquiry I found his "*weakest part*" was his "*penis*," and that quinine had previously, on several occasions, caused it to swell up when taken for malaria.

Upon examination the next day the prepuce was found very œdematous, red, and shining. The swelling being so great the

glans, which was usually exposed, could not be seen when an effort was made to retract the foreskin, his temperature being subnormal (97⅘°); pulse 96, and nervous in character; the cutaneous surface covered with a papular and exanthematous eruption, quite confluent and circumscribed, light rose red in color, together with a large number of accumulated papules, accompanied by an intolerable itching and burning of the skin. The portions of the skin most effected were the backs of the hands, forearms, web of fingers, palms, and soles, and internal surface of the thighs. He was quite nervous, and trembled upon attempting movement, and there was partial amblyopia. These symptoms lasted about twenty-four hours, and began to subside, next day disappearing entirely. A week later the quinine was repeated, 3 grains every two hours being given until he had taken 15 grains. Exactly the same phenomena were reproduced.

It was subsequently learned that paraphymosis had on several occasions followed the use of quinine.—*Medical Herald*, March, 1888.

Prettyman (J. S.) on Veratrum Viride in Puerperal Convulsions.—The patient was thirty-eight years of age, married, and was pregnant, at full term, with her eighth child. Dropsy was general and decided. Convulsions, preceded by local spasms, came on at one A.M.

I gave her ♏x. of tr. veratrum viride hypodermatically, and in half an hour, another convulsion occurring, I repeated the dose. As soon as she recovered consciousness I also gave her, by the mouth, ♏v. of veratrum, with 3 iij. of tr. lobeliæ compound (Am. Dis.) in hot water. She retained this, and did not vomit until after the third convulsion, which occurred in an hour from second, when I again gave ♏x. of veratrum hypodermatically, as before. The drug was continued, by the mouth, in 6-drop doses every hour until six A.M., when patient was thoroughly relaxed and nauseated, with pulse at 58.

She was perfectly conscious until eight A.M., when her first labor-pain was felt. A second pain came on in five minutes, and the child was expelled. Instantly she went into convulsions, before the cord was severed, and I again repeated the veratrum (♏x.) subcutaneously, and continued the same, by the mouth, in 6-drop doses every two hours until noon. No other convulsions having occurred, I then withdrew the veratrum, and ordered tr. bellad. in 10-drop doses every three hours, rather as a placebo, but at the same time having regard for its action upon the vaso-motor system and hoping to slightly overcome the excessive relaxation.

The day was passed without further trouble until five in the evening, when she was again seized with a convulsion, and I gave her ♏xv. of veratrum, hypodermatically, and continued the same in 4-drop doses every two hours through the night and succeeding day. I attribute this convulsion, which was her last, to the action of the belladonna in increasing the vascular tension; for five minutes before it occurred her pulse was 85, and firm and hard.

A microscopic examination of the urine passed at six o'clock on the morning of the 17th revealed many large epithelial and granular casts, while the heat-test indicated in bulk one half albumen. I have several times since examined the urine, and find that the casts and albumen are both gradually disappearing.

The ease with which the child was born and the freedom from hemorrhage were remarkable. I have never been present at a birth where so little blood was lost, the placenta being itself almost dry.—*Med. Record*, March 14, 1888.

Genois (L.) on Cucumber Ointment.—The essence of cucumber is made by distilling a mixture of one part of grated cucumber and three parts of diluted alcohol, and collecting the first two parts of distillate that come over.

This distilled essence of cucumber is then mixed with benzoinated ointment in the proportion of one of the former to four or five of the latter. Thus made the preparation is very smooth and creamy, and is of handsome appearance and fraggrant odor.

Some care is required to preserve it in good condition, as it is prone to rancidify in time. The usual way is to cover it with a layer of rose water, and to keep it in a cool place.

As a vehicle for medicated ointments the cucumber ointment is admirably adapted, mixing readily with vegetable powders; extracts (previously softened with the proper fluids), the metallic oxides, etc.; but physicians seem to prefer the various petrolata, the zinc ointment, and other excipients.

Cucumber ointment is also said to be good to heal frosted toes, and to assist the growth of the hair (?).—*Med. Times*, March 15, 1888.

MEDICINE.

Some Recent Testimony as to the Beneficial Action of Cold Bathing in Fever. — Doctor Humbert Mollière, in the *Lyon Médical* for Feb. 19, 1888, reviews the result of different modes of treatment of typhoid fever in his hospital service for the last five years.

In May, 1882, an epidemic of bad typhoid fever broke out in the Quarter Croix-Rousse. Of the patients sent to the hospital, twenty-five women came under the care of Dr. Mollière, whom he treated with the following results: twelve bad cases treated by cold baths recovered; of twelve moderately severe cases, treated by different hydrotherapeutic measures, eleven recovered, and one very light case recovered without treatment.

The single fatal case occurred in a possibly syphilitic subject, death being caused by acute softening of the corpora striata.

A little later, in another hospital, Mollière treated successfully eight sporadic cases by means of cold enemata and applications of ice to the abdomen.

In a few succeeding months twelve more serious cases were treated, eleven by cold baths, and one by lotions and bladders of ice. The latter case and all but one of the former group recovered. The fatal case was a man of forty, who did not enter the hospital until the thirtieth day of the disease, already exsanguinated by profuse intestinal hemorrhages.

At the Hotel Dieu, in the first few months of Mollière's service, he treated seventeen cases; of these four were treated by cold enemata, and one died (a rachitic and tuberculous woman of fifty-six, who succumbed to her pulmonary affection), and thirteen were treated by cold bathing, of whom three died. Of these three, one, a woman of fifty-three, died on the eighteenth day, adynamic, with a low temperature; one, a man of nineteen, died suddenly on the eleventh day, of pulmonary congestion; and the third, aged twenty-five, succumbed, on the twenty-second day (not bathed after the tenth day), to intestinal perforation. The next series treated by the author consisted of thirty-nine cases. Two of these cases were very mild, and not treated. Thirty-seven were treated by cold baths, and thirty-three recovered. Of the four fatal cases, one died of perforation, one of uncontrollable hemorrhage; one, an alcoholic and hysterical woman, of fatty kidneys and broncho-pneumonia; and one, a very delicate woman of twenty-five, after death showed only the characteristic lesions of the disease.

From Nov. 1, 1886, to Nov. 1, 1887, treated thirty cases, with three deaths. Of these thirty cases, eight were treated by cold baths, with one death; one recovered under cold baths and cold enemata; one under cold enemata alone; eight recovered under the combined (though not simultaneous) use of cold baths and antipyrine; one recovered under cold enemata and antipyrine; eight were treated by antipyrine alone, with one death; one patient received all three remedies, and two no treatment at all, one recovering, and one dying, on the day of admission, of peritonitis.

A summary of the author's statistics shows that, of the cases treated by the cold bath, 10.5 per cent. died; by moderate hydrotherapy, 7.4 per cent. died; by antipyrine, 14 per cent. died. The author's statistics are particularly valuable for the reason that he reports *all* cases, and if one excluded cases which were hopeless on commencing treatment, his rate of mortality would be very low.

His experience with antipyrine was very discouraging, and he advises that it be never used to the exclusion of the cold bath.

Doctor Juhel-Rénoy reports [1] forty-three cases of enteric fever treated by cold baths, with a mortality of 6.98 per cent.

Thomas (W. R.) on the Etiology and Curability of Phthisis.—In an article on the above subject in the *Br. Med. Jour.*, Feb. 4, 1888, the author lays particular stress on the value of counter-irritation in the treatment of phthisis. He applies a small blister, 2 x 2 in., under the clavicle, or in some other appropriate place, and says he has seen the cough relieved, the local signs disappear, and the general symptoms much alleviated by such local treatment. Besides this, he uses quinine in tonic doses and iron. He pays great attention to hygienic details, and claims that seven eighths of his cases get decided relief which some would call cure.

[1] *Le Courrier Méd.*, Feb. 18, 1888.

Williams (F. H.) on Sudden Death from Heart Failure in a Case of Pulmonary Tuberculosis.—In the *Columbus Medical Journal* for February, 1888, the author narrates the following case:

A boy of nineteen, consulted him Sept. 25, 1887, with a history of failing health, with cough and expectoration for almost a year. His condition at this time was as follows: Pulse 120, temperature 104°, respiration 30, and there was some diarrhœa present, with night sweats, a troublesome cough, and profuse muco-purulent expectoration. Physical examination showed both lungs involved, the left one the more advanced. He was ordered a daily bath, all the open-air exercise he could bear, whiskey and egg-nogg quite freely, cod-liver oil and tonics, with sufficient morphia to palliate the cough. Treatment by gaseous enemata was begun, with the effect of mitigating his symptoms to rather a marked degree. The temperature fell to almost normal, 99.5°, pulse to 80, the cough and expectoration was very much lessened, and the appetite improved; but the diarrhœa before spoken of again became troublesome, and required pretty full doses of opium and bismuth subnit. to restrain it. October 24th his father noticed that the boy's pulse was quite irregular. That evening his pulse was 80, regular, but rather weaker than at any time previously. No examination of the heart was made, but he was ordered carbonate of ammonia, tr. digitalis and tr. belladonna every four or five hours. October 30th his pulse was 90, weak and very irregular. The lungs were unchanged; the heart somewhat dilated, its action weak and irregular, but no valvular disease could be detected. He was ordered in addition nux vomica, ¼ gr. three times daily. November 3d his father called at the office to get some medicine to restrain the diarrhœa, and said the boy had a slight attack of dyspnœa the night before, but it had soon passed off; this was the first attack he had ever had. On Saturday, Nov. 5th, after lying down awhile, he got up, sat in a chair, and in a few minutes asked his father to fan him, as he could not breathe; but before his father reached him he ceased to breathe.

The author at first suspected the Bergeon treatment might have had something to do with the fatal result, but later concluded that it had not.

[This case belongs to a class somewhat common but little understood. The editor has, in the last two years, seen autopsies on several cases of sudden death, in which the only apparent lesion consisted of disseminated pulmonary tubercles. In one of our hospitals a patient not long since suddenly expired while taking ether for a minor surgical operation. An autopsy revealed an acute miliary tuberculosis of the lungs, of the existence of which the patient gave no history.]

Fatal Pneumothorax Caused by an Exploratory Puncture with the Hypodermic Needle.—Dr. H. M. Biggs quite recently made an autopsy and found pneumothorax, due, he thought, to perforation with the hypodermic needle. A physician introduced a hypodermic needle on each side for diagnostic purposes. The following morning the patient, about 40 years old, was found dead in his bed. The left lung was the seat of extensive interstitial inflammation, with tubercular foci, and occupying certainly not more than half the space usually occupied by it. The heart was drawn considerably to the left. The right lung had collapsed, and lay against the spinal column and to the left of the median line. The chest cavity was full of air. The right lung was found to be very emphysematous, and when it was inflated under water a pin-hole perforation was discovered at its lower border. Nothing of a pathological nature was found about the perforation, and there was nothing further abnormal in the lung except a few very small tubercular nodules. There was not the slightest trace of inflammation in either the parietal or the visceral pleura on the right side.

Dr. Thacher saw a similar case a few months ago. A child had some infectious disease. Pulmonary symptoms developed, and, in order to settle the diagnosis between broncho-pneumonia and pleurisy, the hypodermic needle was inserted on both sides. Within two or three hours intense dyspnœa developed, and the child soon died. Both lungs were collapsed, and a puncture was found through the lower edge of both at the site where the physician said he had introduced the hypodermic needle. There was a slight amount of broncho-pneumonia. —*N. Y. Med. Jour.*, Jan. 14, 1888.

Edwards (W. A.) on Membranous Enteritis.—It is by prophylactic treatment during the remissions or intermissions that more can be done for our pa-

tient's permanent good than during an actual attack ; it is at this time that diet, regimen, and hygiene are indeed the sheet anchors. A careful supervision must be had of the patient's daily life ; all sources of irritation are to be removed, as hemorrhoids or uterine disease. Easily digested or even pre-digested food should be supplied, and care should be taken that undigested particles of food are not irritating the intestinal canal. As constipation usually exists, sometimes to a most stubborn degree, mild saline laxatives are usually most efficacious, or enemata may be resorted to.

Exercise for those who can stand it is of paramount importance ; this, if possible, should be out-of-doors. Dr. Fowler most aptly says, he who stints himself in the drinking of water is dirty inside, and he also tells us that we must drink between seventy and seventy-five ounces of water per day in order to make up for the amount which is excreted by the lungs, skin, and kidneys, amounting to ninety ounces a day ; with the solid food we get but about fifteen ounces. Very few persons at home drink as much as that, but should they go to any of the numerous springs, in which our country is so peculiarly rich, drink five pints of water per day, lead a regular outdoor existence, breathe pure air, as many of our springs are situated in most beautiful mountain regions, where the life spent out-of-doors is most beneficial, the patient will be improved in health, independently of any mineral agent whatever in the water. Unfortunately, however, all our cases will be unable to avail themselves of a course of treatment at the springs, but as there is no doubt that most of the natural mineral waters preserve their value for a long time, we can put patients through a thorough course at their own homes with the additional advantage of having the case under our own supervision.

During the acuteness of an attack, opium will often be found necessary to afford relief, and possibly to check excessive secretion or hemorrhage. Belladonna in the form of the extract, Dover's powder, subnitrate and subcarbonate of bismuth, together with local counter-irritation, all tend to abort the paroxysm, or, at least, to shorten its duration. The following remedies have been suggested : arsenic, copaiba, bromide of potassium, nitro-muriatic acid, henbane, vegetable infusions, prolonged counter-irritation, electricity, turpentine, iron, cod-liver oil, oxide or nitrate of silver by mouth or by high injections, chloride of ammonium, sulphate of zinc, bichloride of mercury, chlorate of potassium, oxide of zinc, blisters, warm water enemata, nux vomica, ergot.—*Am. Jour. Med. Science*, April, 1888.

Dana (C. L.) on Chorea, Spasmodic Tic, and Hysterical Spasmodic Disorders of Childhood.—The author believes that treatment is of benefit in chorea, in shortening the disease, or preventing chronicity, and in relieving symptoms.

He has a strong belief in the efficiency of careful anodal galvanization of the brain in this disease. He strongly recommends that the rheostat and galvanometer be used in giving the current, and that from one to three milliampères be given daily.

He corroborates the general testimony as to the value of arsenic. In some cases bromide of zinc seems better ; and in one case improvement followed amyl nitrite. After treating a case for two weeks at least improvement ought to be noted. If it is not, then some change of treatment is indicated. The rest treatment he finds utterly impracticable, for ordinary cases at least. One cannot keep a choreic boy in bed, unless he is so bad that he cannot walk any way.

Zinc is a good remedy in chorea, nearly equal to arsenic. It can be given in the form of the valerianate, bromide, or sulphate. He prefers the bromide. In any case it should be pushed to the limit of tolerance—*e. g.*, gr. v–xx, t. i. d.

He has not observed that cold douches or the ether spray to the back do much good. Hyoscyamin acted very well in three of six cases. Helenine acted well in three cases.—*Arch. f. Pediatrics*, April, 1888.

Oviatt (G. A.). Singular Succession of Symptoms in a Case of Malignant Disease.—May 10, 1880, I was called to see Mrs. M. G., who had been suffering for some weeks from loss of sleep. She was fifty years of age, the mother of one child, and had had one miscarriage, fifteen years previous to my visit. She was of unusually dark complexion, of medium height, rather thin, and had just passed the change of life. She had never been ill, and had been able to perform her accustomed duties without any assistance, save at the time of her confinement.

I found her suffering not only from in-

somnia, but melancholia. She was much disturbed lest the family should come to want, although in very comfortable circumstances. I ordered large doses of bromide of potassium combined with chloral, after taking which she was able to get more sleep, but the depression of mind was in no way relieved.

At the end of a week an eruption of a bright red color appeared on her lower extremities and trunk, showing a decided tendency to spread. The second day after it was discovered it had assumed a darker shade, and covered almost the entire body. At first, I had supposed it to be caused by the large doses of bromide of potassium administered, but now thought it must be cutaneous erysipelas. The pulse, on the morning of the second day, was 120, the temperature 104°. The heart-sounds were weak, and that organ seemed taxed to its utmost.

Twenty drops of tincture of chloride of iron and a desert-spoonful of whiskey were ordered in alternation every two hours. The topical application used was a solution of acetate of lead, applied, where it could be, with any convenience.

At the end of six days the erysipelas departed, followed by a very marked desquamation. During all this time the melancholia had been absent, and the patient had been able to sleep well, except when kept awake by the itching of the cuticle.

As bodily health returned the mind was again affected, and as badly as before. About this time a tumor was detected by the nurse in the left breast, with retraction of the nipple.

In the autumn, the tumor gave her so much uneasiness that, being pronounced a cancer, it was removed. After this for a year she was in the best of spirits, and considered herself quite well. At the end of a year she was compelled to undergo a second operation. Six months after the second operation, she placed herself in the hands of a quack to have the cancer drawn, as it had again appeared, and was very painful. This last treatment was pronounced to have been entirely successful. Three months after I was called in, as the left arm was very much swollen; there was a great deal of pain, and from a small cavity in the axilla a thin, watery pus of a characteristic odor was exuding. The melancholia was very marked. The dread which the patient had lest she should be obliged to go to the almshouse was much greater than her fear of present suffering. Morphia was injected subcutaneously every night; otherwise she had no sleep.

Three months before her death a rodent ulcer of cancerous nature appeared in the lumbar region, which rapidly increased in size from that of a quarter of a dollar to the circumference of an ordinary teacup. A very small one also appeared just above the nape of the neck. They both had irregular, purplish edges, and the pus had a very offensive odor. In the lumbar region the vertebræ were almost exposed.

She was able to sit up until within a few days of her death, and went to bed only at night.—*Boston Med. and Surg. Jour.*, March 1, 1888.

Rabagliati (A) on a Case of Acute and Rapidly Fatal Peritonitis, with Scarcely any Elevation of Temperature.—The patient was a boy of five, whose brother had died three weeks previously of peritonitis after an illness of forty-eight hours. The child had been out of sorts for a fortnight. On Nov. 23d he vomited after dinner, and when examined was found with a moist, furred tongue, with some abdominal pain, not severe, and more marked in the right ileo-lumbar region. The abdomen was full and tympanitic, the pulse 130, respiration 30, and temperature 98°. The face was sunken and pale, and the nose pinched. Hot fomentations were applied, opium and stimulants administered, and the diet restricted. The patient died on the fourth day, the temperature rising on one day to 99.7°.

An autopsy revealed a gastro-duodenitis and an acute general peritonitis.—*Med. Press*, Feb. 8, 1888.

Lewtas (J.) on Tumor of the Intestine: Symptoms Simulating Biliary Colic.—Colonel M., aged forty-five, who had lived in India for some twenty years, was seized, about 2 A.M. on 4th June, with agonizing pain referred to the right side of his abdomen. An injection of morphine gave relief. But in the course of the following night the pain returned with even greater intensity, so much so that recourse was had to chloroform inhalation. The case seemed obviously to be one of gall-stone colic, and directions were given to wash the fæces through muslin. On the 6th June the patient passed what he thought was a "piece of flesh," but which

was a lymphoma of nearly square outline, measuring about one inch and a half along each side, and a quarter of an inch in thickness. A dull pain in the abdomen, chiefly on the right side, continued for some days, at the end of which he regained his usual excellent health.—*Br. Med. Jour.*, Feb. 25, 1888.

A British Opinion of Trained Nurses.—When trained nursing became a recognized calling it was ushered in with the happiest omens, and perhaps a little too much flourishing of trumpets. Miss Florence Nightingale had endeared herself to all civilized people by her self-sacrificing heroism, and her example attracted many who were quite willing to accept the deserved eulogies bestowed on the pioneers of the calling, who, be it remembered, worked most unostentatiously. To-day everything is changed nursing, becomes a "profession," and nursing institutions seek a royal charter; lady nurses write queries to medical journals, and express doubts as to the proper treatment of cases. From being the bidable, cheerful worker the modern nurse has become aggressive and captious. We have known a lady nurse to waken, by shaking, a patient from a profound sleep, where sleep was essential for recovery, because she did not approve of the dose of the hypnotic given. The time has come to speak plainly, and the profession should recognize the truth that there is an unwise silence as well as an unwise speech. Trained nurses know just enough to make them dangerous when they attempt to practise in our absence, and this modicum of knowledge is quite sufficient to render them talkative, self-assertive, insubordinate.—*Medical Press*, Feb. 29, 1888.

Hulke on a Case of Long-Continued Priapism after Coitus.—On Dec. 27, 1885, an artisan, aged thirty-four, was admitted with priapism. His penis was stiffly erect, very turgid, hard, tender, and painful. The greatest tenderness corresponded to the attached part of the left crus. The patient said that one week previously, after drinking heavily of cider, he had intercourse with his wife on going to bed at night. Neither he nor his wife was aware of the occurrence of any thing unusual in the sexual act. He afterwards fell asleep. On waking next morning his penis was still erect, and it was also very painful. This condition persisting, and the painfulness of the organ increasing, he was at length constrained to come to the hospital for relief. A mixture containing sulphate of magnesia and tartar emetic was given to the man at short intervals until he was nauseated and purged, and after this he was directed to take bromide of potassium in doses of fifteen grains three times daily. The penis was smeared with extract of belladonna and unguentum hydrargyri.

On January 3, 1887, a week later, no obvious alteration in the state of the organ having occurred, the above treatment was abandoned and the continuous application of ice substituted for it. This was followed by a marked, but very slowly progressive, decrease of the turgescence. On January 17th the penis had become soft, pendulous, and painless, so that he was then able to bear the pressure of his dress and to leave his bed. Next day he returned to his home. At that date the only remaining objective trace of the former condition was a small hard knot near the posterior extremity of the attached part of the left corpus cavernosum. Abstention from coitus during several weeks was strictly enjoined. He was next seen on February 19th, when he reported that he had obeyed the injunction till two nights previously, when he attempted coitus, but failed through incompleteness of erection. The further history is unknown.—*Lancet*, Feb. 18, 1888.

MISCELLANEOUS.

Park (R.) on Sarcoma of Thoracic Wall; Exsection.—January 21st, F. C., male, aged thirty-four. Nearly twenty-three years ago the patient, a man of thirty-four, had bruised his left leg. A few months later he noticed a small hard nodule about the size of a pea on the middle of its outer aspect. This lump steadily increased in size during the following fifteen years. Its dimensions at the end of this period seemed to become more rapidly augmented. A diagnosis of sarcoma was given, and amputation at the knee performed by Dr. T. J. King, of Machias, N. Y. A rapid and uninterrupted convalescence followed. The patient again consulted Dr. Park on January 20, 1888. A small firm tumor about as big as a hen's egg had appeared during the previous few

weeks on the left anterior thoracic wall, situated a little below and to the outer side of the nipple. The growth had clearly-defined edges, had not involved the overlying skin, had induced no glandular enlargement, but was tender and painful on manipulation. More or less severe pain had been experienced in the region. On physical examination the lungs seemed normal.

Dr. Park had consented to operate only after earnest solicitation on part of the patient. The general condition of the patient was good. Ether was used. After proper antiseptic preparations were made, a linear incision was carried down through the superficial structures to the tumor, following in a measure the direction of the ribs. The non-adherent skin was held aside while the operator endeavored to separate the nearest involved rib from its interior periosteum and the pleura costalis. In the effort it broke. A spicula of bone penetrated into the pleural cavity, admitting air with it. With a condition of pneumothorax such precautions as had been taken were unnecessary. The operator therefore addressed himself to rapid exsection of the sarcomatous mass. The introduced finger discovered that the growth was protuberant into the thoracic cavity, exceeding by considerable the external portion. Without any delay the operator removed the entire structure, taking a portion, as shown by a subsequent examination, of the fourth, fifth, sixth, and seventh ribs; in the aggregate a surface of thoracic wall about three and one half by five inches was lost.

It was found necessary to ligate and detach an adhesion of the lower border of the upper lobe to the internal tumor.[1] A beautiful and instructive exhibition of the pericardial sac now presented itself, giving with distinctness the cardiac movements. An examination, both digital and ocular, showed many disseminated metastatic nodules in the lung. It was hopeless, the operator remarked, through their number to attempt their removal. The external inverted T-shaped wound (a second upward cut having been added to the first) was now closed with continuous cat-gut sutures, and an iodoform and sublimate dressing applied. Toward the close of the operation, although no respiratory alterations had been noticed, the pulse gave evidences of shock, compelling the free use of stimulants hypodermically. When taken from the clinic the patient's face was slightly cyanosed, pulse 140, and respiration 40. He regained consciousness within an hour, and complained of great pain, which was relieved by the exhibition of morphia hypodermically. 101° was the highest temperature observed during the succeeding five days. Respirations fluctuated between 30 and 50. For two or three days there was to be heard over the left lung, especially its upper portion, considerable respiratory murmur, evincing that some dilatation and use had followed the lungs' complete collapse. Nourishment was taken during the entire time without distress. At times his condition as a whole was quite favorable and encouraging. However, death occurred from heart failure on the seventh day after the operation. *Post-mortem:* The left pleural cavity was found filled with sanguinolent serum, but without the slightest odor of decomposition.—Clinical lecture, reported by W. H. Bergtold for the *Med. Press*, of West. N. Y., March, 1888.

Parry (L. V.) on a Case where a Suppurating Spleen was Opened and Drained.—T. D., aged 30, was admitted on Dec. 9, 1886 complaining of shooting pains in both legs, particularly the left, with some swelling. He had not resided abroad, nor was there any history of his having suffered from any form of malarial fever. He appeared to have been a temperate man, confining himself to drinking a moderate amount of beer daily. He had an attack of acute rheumatic fever five years ago, and had suffered a good deal in this way since. He was by occupation a painter, and was a good deal exposed to damp and cold. He had a rather severe fall some time previously, and was unconscious for three days. He also appeared to have suffered from a severe attack of bilious vomiting three years since. His present illness seemed to have commenced a month ago with shooting pains and swelling in the lower limbs, from the groin downwards.

On admission he presented the appearance of a fairly nourished, healthy-looking man. There was no jaundice color, the skin being white and free from œdema, except over the abdomen. There was no œdema of face; there was fluid in both knee-joints, and the right metatarso-pha-

[1] A similar experience befell Weinleicher. See MEDICAL ANALECTIC, 1888, p. 20.

langeal joints were swollen and tender. Pulse 84, temperature 100°. Cardiac dulness increased. A thrill felt below the nipple, and a systolic murmur audible over second left costal cartilage. Slight dulness over the bases of both lungs. On examining the abdomen the liver dulness was found increased to four inches and a half. On the left side a dull area extended downwards from the last rib for four inches, and this dulness could be traced forwards up to within half an inch of the umbilicus. There was pain and tenderness on pressure in both lumbar regions, especially in the left. The urine was normal in color; specific gravity 1,012; acid; a trace of albumen. He frequently had retention; he stated that a year ago he passed blood for twelve hours; he had never had any rigors.

During the next few days increasing pain and tenderness in the left lumbar region and in the left side, above the iliac crest, was complained of. On the 11th the temperature rose to 102.4°; on the 13th a distinct tumor was discovered, coinciding anteriorly and superiorly with the area of dulness referred to above, on the left side, and posteriorly terminating at the anterior superior iliac spine. On the 15th he suffered much from pain in the lumbar regions and thighs. The urine was found to contain pus, which previously had been absent, also hyaline casts and granular epithelium. The blood presented an abnormal amount of white corpuscles. The splenic dulness was found to be continuous with that of the tumor; on these grounds splenic abscess or tumor was diagnosed. On the 17th the tumor, which was increasing in size, first manifested fluctuation. On the 24th, fluctuation being distinct, and there being much pain and tension, with a temperature of 102°, an aspirating needle was introduced two inches above the iliac crest, and nineteen ounces of dark, chocolate-colored fluid were withdrawn. The microscope showed this fluid to contain multitudes of altered red corpuscles and leucocytes.

The patient was better on the whole for some days after the aspiration, but the tumor was not much diminished, and on January 3d it was needful to repeat the operation. Thirteen ounces of fluid, similar in character to the first, were withdrawn; the fluid was quite sweet. On the 17th ten ounces more were withdrawn. On the 21st the patient was attacked with acute abdominal pain. He was becoming emaciated, and it became clear that the medical treatment pursued needed to be supplemented by surgical interference.

An incision was made parallel with the last rib on the left side. About thirty ounces of pus, of a dirty-yellow color, escaped. Masses of broken-down tissue, afterwards proven to be splenetic, were present in the discharge. The cavity was washed out with a weak carbolic-acid solution, and a large drainage-tube was inserted. An apparently independent abscess developed above Poupart's ligament, but with this exception convalescence was uninterrupted and recovery perfect.—*British Med. Jour.*, March 21, 1888.

[According to the *Medical Press*, March 21, 1888, an unusual operation has just been performed by Carl Launstein (*Deutsche Med. Wochenschrift*) for abscess of the spleen. He plunged an aspirator needle through the eighth intercostal space in the axillary line into the spleen. Upon finding pus, he rescued a portion of the ninth rib, and with a thermo-cautery opened a large abscess. The spleen was now drawn forward, and the pus cavity washed out. The case made a good recovery.]

Van Cott (J. M.) on Infantile Umbilical Hemorrhage.—As regards the treatment of such cases the writer says that icterus is seen to be a prime cause in producing hemorrhages. It is therefore to be combated, if possible, from the time of its appearance.

Prophylaxis is found in strict cleanliness around the navel, remembering the fact that these conditions may result from infection of the navel with the products of decomposition.

Grailey Hewitt advises that a good respiratory act be insisted upon. He further advocates mechanical friction over the hepatic area with a stimulating liniment, and internal exhibition of calomel in small doses, followed by castor oil at intervals.

To this, Glaister would add gentle stimulation of the skin and kidneys.

To these might properly be added ipecac as a fine gland stimulant, and the muriate of ammonia for its possible solvent effect on inspissated mucus.

If hereditary syphilis be evident, the lesion will likely exist in the stroma of the gland, and antisyphilitic treatment would seem to offer the best chances.

The treatment of the immediate hemor-

rhage is carried out upon surgical principles of hæmostasis. — *Brooklyn Med. Jour.*, March, 1888.

Swallowing of Foreign Bodies.— Dr. E. J. Jones, of Oak Hill, O., reports the following cases[1]: "Mr. J——, being fond of shooting squirrels, one day made several dozen rifle-balls and placed them in a small box where he usually kept them. After eating his dinner, he was preparing to go to look for squirrels, but the rifle-balls could not be found in the box. After searching in vain for the balls he abandoned his purpose. The following day his three-year-old boy passed, with the fæcal evacuations, forty-two rifle-balls. The child had shown no signs of sickness.

The following case also occurred in the same neighborhood. A two-year-old girl had been noticed picking at the nose (which was slightly swollen) for several days. One day she forcibly sneezed, ejecting from the nostril a large white bean, which had growing from it a young sprout about half an inch long. The bean had undoubtedly sprouted in the nostril, as there were no sprouted beans about the house."

An anonymous correspondent in the *Lancet* writes[2] that a male lunatic swallowed both glasses of an ordinary pair of spectacles at 2 P.M. on Friday, the 14th inst. They were passed together about 8 A.M. on Sunday, the 16th—*i. e.*, forty-two hours afterwards. No inconvenience resulted. Treatment consisted in the liberal administration of puddings made of farinaceous food.

In the *Lancet* for Nov. 5, 1888, another anonymous writer reports the following case:

On Whit-Sunday (May 29th), I was startled by a message that a young patient of mine, aged eight months, had "cut his throat." The messenger, who was a foreign gentleman, drew his hand across his throat so that there might be no mistake. I arrived at 1.30 P. M., and found that the mother had been alarmed at seeing some blood coming from the *inside* of the throat, and that at the same time she had missed the screw and clip which was used for the purposs of compressing the tube of the feeding bottle. I appeased her alarm, and next morning at 7.45 the child passed it, open to the full point just as I forward it. A word of warning to mothers to discard these clips would be useful. A knot in the tube, tightened or relaxed according to circumstances, is sufficient.

Mr. Eglinton reports [1] the removal of a set of false teeth from the stomach by an ingenious device:

On Friday last, about 8 A.M., I was called to see Mrs. B——, the messenger stating that she had swallowed her artificial teeth. On my arrival she said she was in the habit of sleeping with the teeth in the mouth, and that they comprised the four upper incisors, with a composition-plate fitting half the upper palate. On awaking, she found the teeth in her throat, and was obliged to swallow them. She complained of pain in the epigastrium and between the shoulders. I passed the horse-hair probang down the œsophagus into the stomach, and gently moved it about in the stomach, but was unsuccessful in extracting the teeth. I repeated the operation three times unsuccessfully. I then administered an emetic consisting of one scruple of ipecacuanha powder and ten grains of sulphate of zinc in a cupful of warm tea, and directed the patient to eat a few figs, which she did. Having to leave to attend a labor case in an adjoining street, I called about an hour afterwards, and found that she had vomited the set embedded in the figs. During the afternoon part of the day she complained of the former pain between the shoulders and in the epigastrium, and was unable to lie down. Relief was obtained by ten-drop doses of tincture of opium and hot poultices applied back and front. On calling the next day I found her free from all pain, and to all appearance perfectly well—a happy issue out of her trouble.

Insertion of the Ureters into the Rectum.—*The Am. Pract. and News* for March 3, 1888, quotes from a foreign journal that Novaro was the first to succeed in transplanting the ureters from the bladder to the rectum in dogs. The operation succeeded perfectly, and the sphincter ani sufficed to retain the urine for some time. A dog operated upon by him in January, 1887, is still alive (Feb. 9th), and in excellent condition. Novaro thinks the operation of great value, and intends applying it in a case of total extirpation of the bladder.

[1] *Medical Record*, Feb. 18, 1888.
[2] Oct. 22, 1887.

[1] *Lancet*, Nov. 5, 1887.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital.

VOL. V., NO. 15. April 12, 1888. WHOLE NO. 63.

CONTENTS.

	PAGE
Leading Article	173
Occasional Report on Obstetrics and Gynecology	178
Therapeutics	182

LEADING ARTICLE.

Peckham (Grace) on the Nervous Symptoms, Local and Reflex, Arising from the Displacements and Inflammations of the Uterus and its Appendages.[1]—In the scant literature which has been written upon the nervous affections dependent upon abnormal conditions of the uterus and its appendages, there has been presented, for the most part, an array of unusual and startling cases, until the profession, and the public, too, as for that matter, have come to feel that a woman's organs of generation are seldom in a state of perfect health; rather more, that they are centres from which emanate the most terrible and awful nervous explosions. This is, indeed, sometimes true, but not nearly as often as one is led to suppose from the articles which, from time to time, come from the pens of our most eminent gynecologists, illustrated with cases numbering from one or three to a dozen or more, setting forth weird reflex neuroses starting from the genital tract.

For the last four years, in taking the histories of my gynecological cases, I have had in view the finding out of how extensively and in what directions the nervous system was implicated in diseases of the uterus and its appendages. This paper, therefore, has not for its object the presentation of unusual and bizarre cases. Out of over two thousand cases, I have selected for analysis about five hundred. I have set aside any in regard to which there might arise some question as to the diagnosis, either of the disease of the uterus and its appendages, or the dependence of the disturbances in other parts of the body upon pelvic trouble. It can be easily understood that it is difficult to gather together cases which are typical and uncomplicated with other troubles. To simplify my already too complex subject as much as possible, I have excluded from consideration all the nervous disturbances of menstruation and the menopause, and those arising from neoplasms. The symptoms classify themselves naturally into four distinct groups: 1. Those of the pelvis. 2. Those of the alimentary canal. 3. Those of the head. 4. General nervousness, including hysteria.

Besides these, there remain a few peculiar symptoms which do not readily fall into this classification, but should be noted.

This may not be the most scientific way of regarding the symptoms, but for purposes of study and contrast it has seemed the most practical.

In complete prolapsus we find that out of 37 cases 25 suffered no pain, nor experienced any nervous disturbance. The trouble was entirely that of a mechanical inconvenience. Two had no pain, but great dyspepsia, which possibly might not be attributable to the nervous disturbance; 5 had pain only in the hypogastrium; in 1 the pain was referable to the whole pelvic region, 1 to the right side, and 1 to the left side; 2 had lumbar and sacral pains; 1 suffered from general nervousness.

In prolapsus of the second degree, 15

[1] This paper has so much intrinsic worth that it is reproduced entire with the exception of the table.—Editor ANALECTIC.

had pain referable to the whole pelvis, in 3 of which the pain was of a bearing-down nature; in 2 it was sticking in character; 1 complained of pain in the hypogastrium alone; 5 had pain in the back, and 4 in the left side; 2 had flatulence, and 2 felt as if something were moving in the abdomen, a sensation which gives rise to the notion that pregnancy may exist; 2 had general headache; 1 had headache referable to the vertex; 1 had dizziness.

In prolapsus of the first degree, of the 20 cases 8 had pain referable to the whole pelvic region, 4 to the left side, 4 to the lower lumbar and sacral regions; 1 had flatulence; 2 had dyspepsia; 1 had disturbance of the general nervous system.

Considering, also, in this connection, anteflexion with prolapsus, there are 6 cases, and no nervous disturbance outside of the pelvis, the pain occurring in the whole pelvis and on either or both sides. In retroflexion with prolapsus (9 cases), 4 were troubled with headache.

In 97 cases of prolapsus, 37 were of complete prolapsus, 20 were of the first degree, 25 were of the second degree, 6 were of anteflexion with prolapsus, and 9 were of retroflexion with prolapsus.

In the analysis of these cases it is shown that in only 16 have the symptoms extended beyond the pelvis; that they are mainly referable to the whole pelvis or to the left side; that the cases of the first and second degree give rise to pain, owing to the dragging and pulling away of the organ from its attachments, but when this is accomplished and complete procidentia has become a fact, pain is no longer a prominent symptom.

The cases in which anteversion occurs, uncomplicated with inflammation or other troubles, and of sufficient degree to be considered pathological, are not very numerous. There were 8 such to be found: 1 had no pain, except menstrual; 4 had pain in the whole pelvis, 1 complaining of it especially in walking, another saying that it reached to the shoulders; 2 had pain in the right side; 1, in both sides. Of these, 2 complained of headache, and 1 of dizziness.

Retroversions are more numerous. Of the 34, 6 had no pain (came for dysmenorrhœa); 16 had pain in the whole pelvis; 4, in the left side; 1, in the hypogastrium; 2, in the back; 1 had headache, and no other disturbance; 4 had general headache · 2 complained of dizziness; 2, of creeping sensations in the back and cold perspiration.

Of 32 cases of anteflexion, 17 complained of pain in the whole pelvis; 2, of each side; 1, of both sides; 1, of hypogastrium; 5, of the back alone or of the back and sides together; 1, of flatulence; 1, of dyspepsia; and 4, of general headache. Two had general nervousness; 1 was subject to fainting attacks; 2 were hysterical.

In retroflexion, of the 39 cases 5 complained of no pelvic pain; 20 had pain referable to the whole pelvis; 2, pain in the right side; 4, in the left side; 1, in both sides and back; 1, in the hypogastrium; 6, in sacral and lumbar region. The intestinal disturbances were peculiar; 2 felt the flutterings as if pregnant; 1 felt as if "the wind worked up to her head"; 4 had dyspepsia; 3, vomiting; 11, general headache; 1, frontal headache; 3 had dizziness; 3 had hysteria; 3, general nervousness; 1, cold perspiration.

In the 42 cases of versions 19 had nervous disturbances extending beyond the pelvis; and in the 71 cases of ante- and retro-flexions, 20. The flexions act more seriously on the general nervous system than any of the other purely mechanical displacements. The circulation of the uterus in flexions is so impaired that they cannot exist long without giving rise to inflammatory conditions which bring with them pelvic pains. Shortly the circle of disturbance spreads to the periphery; the digestive functions become disturbed, and neuralgias are invoked.

Passing on to the inflammatory conditions, we will first consider endometritis. I have excluded from this list a large number of cases in which the only symptoms were those of menstrual derangement, either dysmenorrhœa or menorrhagia due to fungoid growths. Of the 45 cases 27 had pains referable to the whole pelvis; 3 had pains running down the thighs; 1 had pain in the right side, and 9 had pain on the left; 8 had pain in the sacral and lumbar regions, and 2 in the hypogastrium; 2 had dyspepsia; 3, nausea; 8 had general headache; 1, frontal headache; 3 complained of dizziness; 3 had general nervousness; 3 had hysteria; 1 had paræsthesia; 1, general neuralgia; and 1 complained with trouble with the eyes

In 29 cases of endometritis with anteflexion, 19 had pelvic pain; 3 had pain in the right side; 1 in hypogastrium, and 5

in sacral and lumbar regions ; 6 had flatulence ; 2, dyspepsia ; 8, general headache ; 1, dizziness ; 3 were hysterical.

In the 37 cases of retroflexion with endometritis, 21 had pelvic pain ; 2 had pain extending down the legs ; 2 had pain in the right side ; 4 had pain in the left side ; 2 had pain in the hypogastrium ; 3 had pain in the lower lumbar and sacral regions ; 8 were dyspeptic ; 5 had nausea ; 6 had general headache ; 1, headache at the vertex ; 1, occipital headache ; 1 was dizzy ; 1 complained of the eyes ; 1 had melancholia ; another had chilly sensations.

In the 111 cases, 45 were of endometritis ; 29 were of endometritis and anteflexion ; 37 were of endometritis and retroflexion. Of these, 44 had symptoms extending beyond the pelvis.

Of 26 cases of contractions and chronic inflammations of the broad ligaments, in 1 case both ligaments were tender and contracted, but the pain was referred to the left side. In 1 (left side) there was no pain. In 2, where the trouble was on the left side, the pain was located upon the right ; and, *vice versa*, in the cases where trouble was in the right broad ligament, the pain was on the left. In 13 cases both the trouble and the pain were on the left side, and in 2 others the left side and back were seats of pain. Two with trouble in the right side had pain in the back, and 4 with trouble in the left side had also pain in the back. Three had flatulence ; 2, dyspepsia ; 1, nausea ; 3, general headache ; 1, frontal headache ; 3, dizziness ; 1 had hysteria ; 1, paræsthesia ; 1, trouble with eyes ; and 1, hiccough.

Of 6 cases of anteflexion, complicated with trouble in the broad ligaments, 2 had pain in the right side ; the remaining 4 had sharp, burning, cutting pain in the left side ; 1 only suffered from dizziness.

There were 16 cases of retroflexion associated with disease of the broad ligaments ; 6 had pain referable to the whole pelvis ; 6 had pain in the left side ; 1 had pain in the hypogastrium ; 3 had pain in the lumbar and sacral region ; 7 had headaches.

In 26 cases of trouble with broad ligaments, in 1 pain was referred to both sides ; 20, in left side ; 5, right side ; broad ligaments and anteflexion, 6 cases ; broad ligaments and retroflexion, 16—total, 48. Among these are included those masses of inflammation in which are bound up the ovaries and the tubes in such a manner that it is difficult to differentiate them one from the other. It is interesting to note that in 12 cases out of the 26 of trouble in the broad ligaments the disturbance extends beyond the pelvis, while in the complications with anteflexion and retroflexion, 24 in number, 8 only had trouble, and all of those referable to the head.

In considering the 16 cases of ovaritis, I am unable to make an exact statement with reference to prolapsus of the ovaries associated with ovaritis, but my impression is that the cases of prolapsus without ovaritis which come to the physician for aid are very few in number, and also that the cases of ovaritis without prolapsus are equally few. In 8 cases the pain was general, except in 1 instance, when in the left side ; in 2 cases, in which both ovaries were prolapsed, both sides were affected ; in the other cases, 3 of each, the pain was referred to the corresponding side ; 2 had headaches, 1 of whom felt as if her head were on fire ; 2 were dizzy, 2 had hysteria, 1 had attacks of fainting, 1 felt cold as ice on the left side.

In 4 cases of anteflexion with ovaritis, 2 had general pain in pelvis ; 1, pain in the left side ; 1 had pain in the back, 1 had dyspepsia, 1, nausea—all 4 suffered from headaches ; 2 had pain in the heart, and 2 had general nervousness.

In 4 cases of retroflexion associated with ovaritis, 2 had general pelvic pain, 2 had pain in left side (corresponding to ovary) and the back. All were generally nervous, and had headaches. Summary : Ovaritis, 16 cases ; ovaritis and retroflexion, 4 cases ; ovaritis and anteflexion, 4 cases—total, 24 cases.

The reason I present so few cases of ovaritis complicated with displacements, is not because they are lacking, but because they are more often complicated with other inflammatory conditions of the pelvis, such as cervicitis, endometritis, and parametritis. I think, however, that these cases are typical, and show that anteflexion, associated with ovarian disease, gives rise to a more general nervous disturbance than almost any other complication.

There are 26 cases of metritis, in which are included subinvolution, and the more chronic hyperplastic conditions. Sixteen had general pelvic pain ; in 1 the pain extended down the leg ; in 2 the pain was in the right side, and in 2 in the left ; 1, in the hypogastrium ; 4, in the back. I find no

disturbances of alimentary canal recorded. Five had general headaches; 1 had frontal headache; 1, of the vertex; 3 had cold and chilly feelings. In 4 cases of anteflexion associated with metritis, the pain was located in the pelvis—1 in both sides and back, 1 in hypogastrium, and 2 in the back. Cases of metritis with retroflexion, without other complications, are not numerous on the list. Two cases, with decided pain in the back and general nervousness, are all that I can bring forward just now. It is true, I think, that a metritis uncomplicated with flexions gives rise to little disturbance or discomfort outside of the pelvis itself.

In 26 cases of subacute and chronic parametritis, 16 complained of pain in the whole pelvic region; 1, the pain extended down the leg; 3, it was on both sides; 1, in the left side; 5, in the back; 4 had dyspepsia; 1, nausea; 8, general headaches; 1, frontal headache; 1 felt prickling like needles; another was sleepless.

It must be remembered, with reference to these cases as well as the others, that I only bring out the distinctly local and reflex nervous symptoms.

I have endeavored, in considering the cases of the cervix, to eliminate all other pathological conditions. So much has been written about the reflex influence of cicatricial tissue remaining in cervical angles, that the matter has assumed surgical importance. The 14 cases of fissured cervix which I present were without inflammatory trouble, but the cases of cervicitis and endocervicitis were, many of them, complicated with lacerations. Of the fissured cervices, 5 had pain in the whole pelvis; 1, on the right side; 2, on both sides; 1, on the left; 2, in the hypogastrium; 4, in the back; 2 complain of flatulence; 1, of general headache; 1, of frontal headache; 1, of curious sensations about the umbilicus. Of the 47 cases of endocervicitis, 36 had general pelvic pain; 2 had pain in the right side, 1 in both sides, 1 in the left side, 2 in the hypogastrium, and 5 in the back; 5 complain of flatulence, 1 of nausea, 13 of general headache, 2 of headache of the vertex, 3 of dizziness; 1 was hysterical; 2 were sleepless; and 1 was drowsy.

Of the 61 cases of pathological conditions of the cervix, 22 had disturbances outside of the pelvis. The presence of headache was noticeable.

Of the 517 cases, 170, or about thirty-two per cent., have nervous troubles extending beyond the pelvic region. It is interesting to note that, in about half of the cases (226), the pain and discomfort were referable to the whole pelvis, and that pain in the left side is twice as frequent as in the right.

From an inspection of these cases, as well as looking through the very many others which were not sufficiently typical to come under classification, the following deductions have been made:

First.—Nervous disturbance outside of the pelvis is not nearly as frequent in disease of the uterus and its appendages as is generally believed. The impression that one severe case makes effaces that of dozens of simpler ones. Moreover, gynecologists are men who are apt to meet only the severer cases, since women suffer long and in silence before undertaking a treatment which does such violence to their natural modesty. The eminent specialists who have done most of the writing on this subject encounter the most severe and difficult cases, and their object, often, in writing, is to present peculiar and extraordinary cases.

Second.—It has been shown that mere mechanical displacements give rise to almost no disturbance in complete prolapsus. In the other degrees of prolapsus the pain comes from the pulling and stretching of the tissues. Reflection occasions the most nervous disturbance outside of the pelvis.

Third.—It can be seen that the amount of disturbance is in every way proportioned to the amount of uterine tissue involved and the length of time the disease has continued.

Fourth.—It is plainly shown that the reflex nervous symptoms are no more severe nor extensive that arise from displacements and inflammatory conditions of the uterus and its appendages than would be produced by pathological conditions of the same extent and the same chronic character in other parts of the body. When these are present a previous neuropathic tendency, either acquired or inherited, probably has existed, and the uterine trouble is generally extensive and of an aggravated nature, which, acting on the central nervous system, produces a display of disturbed innervation at the periphery, or of disturbed cerebration, which results in neuralgias or hysteria.

Fifth.—In these studies, the effect of uterine trouble upon the eyes have been considered. Three cases, 2 of endometritis and one of inflammation of the broad ligaments, are found. I have met others, but in these, and looking over the literature, I have reached the conclusion that the eye-trouble is generally due to anæmia and general asthenia, and it is doubtful if it can be proven that such troubles with the eyes occur more often in uterine diseases than in others which would produce a similar state of anæmia and depression of the general bodily strength.

Sixth.—Many nervous symptoms are present not *because* of uterine disease, but are due to the constipation and anæmia with which it is so often accompanied.

Seventh.—Nervous disturbances outside of the pelvis are much more prevalent among the more highly organized women of the higher classes than among those of the lower, who have less time to think of themselves, and much less vivid imaginations.

Eighth.—The attention should be called to the fact that sacral neuralgia often simulates uterine disease; the pain is very like that described in many of the inflammatory conditions with displacement, and even with ovarian trouble. It is often associated with pain extending down the leg, and pain referred to the sides and the back, and it is also accompanied with general nervousness. I recall, now, three cases of sacral neuralgia in which the nerves were tender at their exit on the right side, and the great pain complained of was on the left side.

The minute anatomy of the nerves of the pelvis, and its relations with the so-called sympathetic, is far from precise, and we must turn, as has been done in the absorbing question of brain-localization, to clinical data to substantiate hypothesis and theory. I am inclined to think that most of the reflex troubles leave the pelvis through the nerves connecting with the spinal cord, and are thence reflected to the brain, and from the brain to the periphery.

It is not my purpose to discuss at length the treatment, which might properly come within the limits of this paper, but only to speak of the remedies which in these cases have best served their end. If extensive relaxation of vaginal walls and uterine ligaments existed, astringents were used, of which iodine and tannin have proved the most successful. In using tampons for support, great care was taken to make them of such a size that they would support without distending the parts. In non-inflammatory conditions a well-adjusted pessary was the great desideratum. In a case of retroflexion associated with metritis, complete relief from the most distressing dyspeptic symptoms, occurred in a few hours after the uterus was replaced and held in position by a pessary. In inflammatory conditions belladonna, combined with iodine and glycerine, has proved the most useful in relieving pain and taking away the extreme sensitiveness. In the majority of cases the copious injections of hot water have been beneficial. I do not, however, believe in the present wholesale employment of this remedy. I have tried similar cases side by side, one using four quarts of hot water night and morning, and the other not. The curative results were obtained in about the same length of time. In cases of perimetric inflammations, acute and chronic, the hot injections are, indeed, beneficial in the vast majority of instances. In a few cases, for some unknown reason, they have been illy borne, and, instead of allaying the pain, they have increased it.

In all the long list of remedies addressed to the nervous system, there is none that can compare with the bromide of potassium. Five years ago I began to use it, having witnessed its almost marvellous effects in several cases in which I had tried it. Since then I have seen several articles in which it has been extolled. I always combine it with a bitter tonic. It certainly has a direct effect upon pelvic inflammation, aside from the soothing effect upon the nervous system. Where there is a general nervousness, with a tendency to hysteria, a mixture composed of equal parts of valerian, aromatic spirits of ammonia, and compound spirits of lavender has been satisfactory. The ammonia renders the valerian less disagreeable. Next in the list stands a combination of hyoscyamus and camphor. The pill-form of these drugs commends itself, since it is more agreeable to the patient, but I have seldom been able to obtain any thing like the results with pills. They probably do not dissolve. Galvanism has been very successful in allaying the pelvic and general pains.—*Med. Record*, Feb., 1888.

OCCASIONAL REPORT ON OBSTETRICS AND GYNECOLOGY.

Coe (H. C.) on the Significance and Localization of Pain in Pelvic Diseases.—According to the author, pain is not a reliable indication of disease. Often an epithelioma of the cervix would cause less distress than a dislocation. As described by the patient the pains of the pelvic region are, in general terms, an aching pain in the lower part of the sacrum, a shooting pain in the inguinal regions, and the gnawing pain of carcinoma. All of these pains could be referred to some lesion of the peritoneal or connective tissue, or both—to some plastic exudation not necessarily of great amount. The distress caused by a retroflexed uterus was much greater where there were adhesions than where there were not. It was fair to assume that this constant aching pain was due to the implication of nerves in the exudate. Laceration of the cervix, excepting that extending into the vaginal front, did not, in itself, cause pain. The cervix was a very insensitive organ, and laceration was but a link in the chain of circumstances which resulted in pain. Malignant disease did not necessarily give rise to pain. There is generally no pain so long as the cervix only is affected. Hewitt says that the pain of cancer is due to localized attacks of peritonitis. The pain is earliest and most severe when the growth is in the body, thus differing from sarcoma of the body, in which there is little pain. Possibly in this variety of cancer the intra-muscular nerves are involved in the growth. The shooting, darting, sickening pains associated with disease of the tubes is due to nothing but peritonitis. Hegar refers to cicatricial nodules in the broad ligaments, and even in the case of ovarian neuralgia it seems probable that the pain is due to pressure upon the nerve before it enters the organ, rather than to changes within it. Otherwise this pain would not be relieved by the removal of perimetrial adhesion, as frequently occurs.

It is natural then to give a guarded prognosis in regard to the relief of pelvic pain. If the pain associated with a fissured cervix is due to cicatricial nodules in the broad ligament, we may cure the laceration and the endometritis and yet the pain would continue. To remove the ovaries for the relief of pain is even more hazardous.

The writer thinks that gynecologists exaggerate the frequency of reflex pain. With Dr. Dana, he considers anæmia the most frequent cause of vertex headache. Pelvic reflexes are found in the upper lumbar and intercostal nerves. He has not found sciatica of ovarian origin, according to Dr. Mundé's suggestion. It may occur as the result of some exudates, but must be rare as a reflex pain. Dr. Polk's plan of separating adhesions for the relief of pain presents scarcely less risk than the usual operations practised. Treatment by electricity, according to the methods of Apostoli, give the most satisfactory results. Reflex or transferred pains may also be due to inflammatory foci and may be treated in the same way.—*Boston Med. and Surg. Jour.*, Nov. 24, 1887.

Kelly (H. A.) on Removal of the Uterine Appendages for Disease in Which Pain is a Prominent Symptom.—It would be better if pain, *per se*, were never considered a sufficient indication for operation; or, at the worst, only those cases operated upon in which the most prolonged and painstaking care had failed to relieve, and where the intensity of the suffering must always seriously interfere with the capacity of the patient to enjoy life. We here meet the neurologist on common ground, and it would be better for such cases if they first underwent a prolonged treatment at the hands of these specialists. A host of cases of neuralgic ovaries which have been sacrificed by the gynecologist would thus have been cured, and many cases which have been operated upon and not relieved would at least have been spared the ordeal of operation, and the too frequent reproach thus be spared the gynecologist, that he recommended the removal of a woman's ovaries, but she declined, and a nerve specialist afterward cured her, and, to make the reflection worse, she has since borne a child.—*Medical News*, Jan. 14, 1888.

Ovariotomy on a Patient Aged 79 Years and 10 Months, Believed to be the Oldest Successful Case ever Operated upon.—On December 2d, I was asked to see Mrs. S., aged 79 years and 10 months. She was then suffering a good deal of distress from the pressure of an abdominal tumor. The patient was quite a

heroine, and decided at once to have it removed. She appeared to be a very good subject for operation, being a thin, wiry woman, of very good physique. As far as I could diagnose, the tumor seemed a simple one, and though of large size, I thought there were likely to be very few adhesions. The uterus was freely movable. On the 8th of December I operated; on the 11th I removed stitches; on the 17th the patient sat up, and on the 21st went home well. The operation itself was not one of great difficulty, because I recognized that it was a parovarian cyst I had to deal with, so did not seek for pedicle, but shelled it out of its capsule. The incision was 2½ inches long, and I did not find it necessary to enlarge it as there were no adhesions. The tumor contained thirteen pints of fluid, and the cyst was bilocular.—MATTHEWS OWENS in the *Australasian Med. Gas.*, Feb., 1888.

Tait (L.) on a Case of Hystero-Epilepsy Successfully Treated by Removal of Damaged Uterine Appendages.—The patient was thirty-three years of age last July. She was married at eighteen; the first child was born ten months afterwards, the labor being natural and the convalescence perfect. In 1874 she aborted at the third month, the pregnancy being twins. This abortion was followed by pelvic peritonitis on the right side, which seemed to centre in the Fallopian tube, and she was unable to leave her bed for three months. One year afterwards she aborted again, and on this occasion a similar inflammatory attack occurred on the left side; but she was not so severely ill as on the previous occasion. Her second convalescence, however, was very protracted; she never regained her ordinary strength; was unable to walk without suffering from pain in the pelvic fossa, which was greatly intensified at each menstrual period; and ever after the first abortion she was altered in temperament, and became *exalté* and irritable. For four years after the second abortion marital intercourse had to be avoided on account of the intense suffering it occasioned. In the spring of 1885 she was attacked for the first time with a convulsion, which lasted for about an hour, and similar attacks were repeated for two months, twice in twenty-four hours, which were very violent, sometimes requiring five or six persons to hold her. During the following two months they diminished somewhat in violence, in length, and in frequency, and quite disappeared in May, 1885. During that time she made frequent attempts at suicide, and her husband did not think it safe to leave her without the constant presence of a nurse day and night, until December of the same year. During 1886 she had no attack, but was very feeble, very highly excited at times, and alternately in a condition of despondency. On Jan. 2, 1887, she was suddenly seized with violent trembling, which passed into convulsions, and these lasted for four hours. Similar attacks occurred daily, sometimes twice a day, until the middle of March.

Matters went on from bad to worse until on Aug. 16th Professor Porro made an incision in the abdomen three inches and a quarter long, finding both tubes and ovaries so densely adherent that it was impossible to separate them from the mass of organized tissue in which they were embedded. The slighter adhesions he broke up, and then crushed the base of the ovaries with strong forceps, with the hope, he says, of partly destroying their function. She continued to suffer dreadfully. Mr. Tait operated on Sept. 23d, making an incision not over two inches long, and removed the appendages from both sides without any apparent difficulty. The operation from commencement to finish occupied exactly nine minutes and a quarter. The patient has had no trouble since; is bright and cheerful; has a better appetite than at any time during the last three years; the expression of the face has entirely changed; the old, haggard, anxious, irritable look has gone, and in the place is a contented, peaceful expression.

The uterine appendages were found densely adherent, both tubes occluded, and containing certainly not more than a teaspoonful each of limpid serum. The patient has had up to the present time no return of her previous symptoms. After such a demonstration it is idle to talk of hydrosalpinx being a harmless condition which may be always left alone.—*Lancet*, Dec. 17, 1887.

Noble (C. P.) on Antiseptic Midwifery, as Practised in the Philadelphia Lying-in Charity.—In the healthy parturient woman the problem is to prevent the access of noxious matter to the genital passages. In carrying out the antiseptic practice here, it is especially borne

in mind that infection is usually carried by means of the fingers, instrument or other solid bodies brought in contact with the genitalia rather than through the atmosphere.

For the reason that a prolonged residence at a hospital deteriorates the health, patients are admitted only shortly before their expected confinement. While waiting they are ordered baths, not only for cleanliness' sake, but to keep the skin active. A bath is given at the beginning of labor, unless there be some contra-indication. The clothing is also changed at this time. Whenever practicable the parturient is confined in a room separate from other patients. Thus her immediate environment is aseptic.

The nurse is directed that not only her hands but all instruments and implements must be made aseptic before being brought in contact with the patient's genitals. The solutions used to accomplish this, after the use of soap and water, are bichloride of mercury solution 1-2000 where practicable, or carbolic acid 2½ to 5 per cent.—this being used more especially for instruments. Where metal catheters are re-used they are to be passed through a flame, cleansed and washed in carbolic solution. Each patient has a separate syringe, the nozzles of which are to be cleansed and disinfected after use, and again disinfected before re-use. Antiseptic gauze is used for wash-rags.

The attendant is to bear in mind that in normal labor the less the genitals are disturbed the better. Hence, information gained by abdominal palpation, both as to the position of the fœtus and the progress of labor, is doubly valuable, since it is gained without risk. Before making touch the hands are scrubbed with soap and water, nor is the nail brush spared. They are then rinsed in the bichloride solution. Carbolized oil is used as an unguent. Touch is made as seldom as possible. The placenta is expressed. This may be regarded an antiseptic measure, since it tends to prevent the retention of clots—a favorable nidus for germs in the uterus. Rents of the perinæum, unless slight, are sutured; an open avenue for infection is closed. Slight rents are touched with carbolic acid. Soiled clothing is then removed, the external genitals and surrounding parts washed with bichloride solution; a sublimate gauze napkin and the binder are now applied. The sublimate gauze napkin is dampened in the solution where it covers the vulva. In instrumental labors, where the forceps have been used in the pelvic cavity or outlet, a sublimate vaginal injection, 1-2000, is given. When the uterine cavity has been invaded by the hand or instrument, it is also irrigated, and an iodoform pencil is left in the cavity. This is also done after the delivery of a macerated fœtus. Care is taken that sublimate solution is not retained either within the uterus or vagina. The amount of iodoform seems large, but poisoning has not been observed. The formula for the pencil is:

℞	Iodiformi	3 v.
	Acaciæ	
	Amyli	
	Glycerini	āā 3 ss
	M. ft. bacilli, No.	iij

The pencil dissolves slowly, and thus the genital passage is bathed in iodoform for about three days.

The after-treatment is based upon the principle that the puerperal state and puerperal processes are physiological. The vagina and uterine cavity are let rigidly alone, unless special indications arise. Sutures are usually removed on the eighth day. The patient's genitalia are bathed four times daily with the sublimate solution, and the gauze napkin changed when soiled.

The gauze is made in the institution by boiling cheese cloth in a carbonate of sodium solution to remove the oil, and, after drying, soaking it in the sublimate solution, and again drying.

This method of antisepsis has the double advantage of securing for the puerpera that repose which is so necessary for her well-being, and of protecting her against the risks of sepsis. At the same time, she is not subjected to the danger of sublimate and carbolic poisoning, from which she can never be entirely free when these agents are frequently used within the genital passages.—*Med. and Surg. Reporter*, March 31, 1888.

Butler (N. J.) on a Remarkable Case of Vicarious Menstruation.—The patient, 38 years of age, had a florid complexion, reddish hair, rather bloated appearance, and was of a decidedly *flabby* habit of body. She had been married eleven years, has had five children, three living, the other two having died in infancy. She

had not menstruated for over nine months, but at the period when the normal flow should have commenced, after suffering for a couple of days from very anomalous head symptoms and a general feeling of *malaise*, was attacked with a skin disease affecting particularly the anterior aspect of the trunk and upper extremities. She also had considerable hemorrhage from the nose and throat. I found the sleeves and body of her night-dress, which she had kept on for the purpose of showing me, marked in several places with spots or patches of blood. These spots varied in size from a threepenny piece to that of a florin. At first sight the skin presented very much the appearance observed in cases of chronic prurigo—numbers of the elevations being covered with blackish crusts of coagulated blood, but a closer examination revealed the fact that the eruption was really of a vesicular character. From some of the vesicles was exuding a brown fluid, thinner and rather lighter in color than ordinary blood. The flow from these points she informed me was much more copious during the night, and was accompanied by considerable tingling and itching.

This state of things continued usually from five to seven days, with occasional bleeding from the mucous membrane of nose and, as she imagined, throat. At the end of the time mentioned the eruption completely disappeared, the bleeding ceased, and she was restored to her usual condition of health. She was not subject to any leucorrhœal discharge, but there was considerable ovarian irritation. I should also mention that she had a very weak heart. I commenced treatment by ordering drachm doses of Aletris cordial, with ten grains of bromide of potash and fifteen minims of tinct. digitalis three times a day. It was my intention to continue this plan of treatment for three weeks, when I intended to substitute ergot or some other active emmenagogue.

Normal menstruation occurred at the next period.—*Medical Press*, Feb. 8, 1888.

Hirst (B. C.) on Ischio-rectal Abscess Recurring with Every Labor; Fœtus Showing both Sacral and Cervical Spina Bifida.—Mrs. McD., thirty-five years old, who had had eight children, gave birth to a premature still-born infant in the eighth month of pregnancy, which weighed four and a half pounds. Occupying the whole length of the neck behind was a fluctuating tumor, which on dissection proved to be a meningocele, arising from a cleft in the cervical vertebræ. The exact number of bones involved was not noted. Over the sacrum was another very large meningocele. The woman, being questioned, confessed that she had been infected with syphilis some years before. The puerperal state was uncomplicated until the tenth day, when the temperature rose to 100.8°, and the woman complained of pain about the anus. Examination then showed an area of redness and induration to the left of the anus. A free semicircular opening around the border of the spincter ani was made, dressing forceps and grooved director were pushed up along the rectum about an inch, the abscess was opened, and about two ounces of very fœtid pus evacuated. No communication between the abscess and the bowel could be discovered. The temperature fell at once, and the woman made a speedy recovery. She positively declared that, after every preceding confinement, the attending physician had been obliged to open an abscess in the same region: a statement which was supported by numerous old linear scars about the anus. *Med. and Surg. Reporter*, June 7, 1888.

Long (J. W.) on the Complication of Biliary Fistula with Pregnancy.—In September, 1885, I was called to see Mrs. H., aged thirty-five years, the mother of eight children, suffering with hepatic colic.

I soon discovered that I had a case of impacted gall-stone, as within a few days a tumor began to appear at the lower border of the liver. After using various measures, and no relief, I advised cholecystotomy, to relieve the urgent symptoms, but they would not agree to it. The case finally drifted into the hands of another party, who proposed to get rid of the tumor by "scattering" it.

I did not hear from the case for six months, when the husband informed me that the tumor had ruptured through the abdominal walls, discharging eleven gall-stones. I continued to hear from the case occasionally until July, 1887, when she sent for me to perform the operation.

I went to see her, and found that she was five months pregnant. I had thought that it might be best to enlarge the fistula, and explore the gall-bladder, but when she informed me that she was pregnant, I re-

fused to perform any operation, for fear of bringing on premature labor, and thus rupturing the adhesions between the gall-bladder and the abdominal walls.

The case ran on until the 16th of November, when she was safely delivered of a healthy child. For four weeks before her confinement, the side was enormously swollen from the lower border of the breast to the crest of the ilium.

It was apparent that something must give way, and on the 13th, before her confinement, the sac ruptured into the bowel, when, in a few minutes afterwards, she vomited six or eight ounces of mucus and bile. In two hours she was up and around the room, feeling very much relieved.

When labor first commenced there was probably a drachm of bile squeezed out through the fistula, but during the latter stage of labor there was none whatever. I had feared that the descent of the diaphragm would rupture the adhesions, but only once she complained of pain in the hepatic region.

So far as I could detect, the diaphragm and abdominal muscles took no part, or but very little, in the labor.

I am unable to give more than a conjecture what part of the alimentary tract the distended gall-bladder ruptured into. Whether the upward pressure forced the impacted stone out through the common duct, or if, during the acute symptoms, the gall-bladder became adherent to some part of the duodenum, and was discharged in that way.

At this date (December) the fistula has about healed, the opening being very small. Owing to the improvement in her general health, and the subsidence of all inflammation, I am satisfied that the contents of the gall-bladder are passing into the bowel.—*Weekly Med. Review*, Dec. 24, 1887.

THERAPEUTICS.

Mairet (A.) and Combemale on the Degenerative Hereditary Influence of Alcohol.—The authors have been experimenting on animals with alcohol as follows: A dog, chronically poisoned by alcohol, impregnates a healthy young bitch. She gives birth to twelve pups, all of which die within sixty-seven days; two are still-born; three others are accidentally killed. The seven remaining ones succumb to various diseases: epileptiform attacks, enteritis from worms, pulmonary and peritoneal tuberculosis, and, on autopsy, lesions are found which can only be attributed to an alcoholic degeneration: thickening of the skull, precocious sutures, adhesion of the duramater to the skull, inequality of the hemispheres, and fatty degeneration of the liver.

Another healthy, intelligent bitch is submitted during the last three weeks of her pregnancy to the acute intoxicating effects of absinthe. She gives birth to six pups, of which three are still-born; of the three living ones two are well-developed, physically, but lack intelligence; the third, a bitch, barely survived, and had marked intellectual defects and very noticeable anosmia.

This bitch was mated with a smart healthy dog, and had three pups, one of which had club-foot, atrophy of many toes, etc.; another died from patency of the foramen ovale, while the third had stiffness and atrophy of the hind quarters. The degenerating influence is thus seen to be, in this case at least, more marked in the second generation than in the first.—*L'Union Médicale*, March 17, 1888.

Kremianski's Aniline Method of Treating Phthisis.—Dr. J. Albitski, of Valki, in the *Lancet* for March 24, 1888, narrates the results of the aniline treatment in a case of phthisis of four years' standing, the patient being his wife.

When Professor Kremianski first saw her her condition was as follows: Much emaciated, anæmic; no subcutaneous adipose layer; muscular system atrophied and lax; chest sunken both above and below the clavicles; right side dull; cracked-pot sound in the infra-clavicular region; râles over the whole lung; below the clavicle, large râles and amphoric respiration; above it and over the rest of the lung, bronchial respiration; left lung only affected in the upper part, where mucous râles were heard, the vesicular breathing being weakened; liver and spleen enlarged; albuminuria; expectoration of a greenish-yellow color, at times offensive, about eight ounces during the twenty-four hours; temperature somewhat above normal in the morning, and from 102° to 104°, or even higher, in the evening; pulse about 120; appetite very bad; sometimes œdema of the feet and under the eyes; every movement produced dyspnœa; constipa-

tion alternating with diarrhœa; almost constant epigastric pain; the sputum was found to contain immense numbers of Koch's bacilli.

Professor Kremianski ordered her meat powder (prepared by drying the meat at a low temperature) as nourishment, acetanilide to reduce the pyrexia, and eucalyptus-oil or oil of anise with pure aniline oil (aniline) for inhalation in the inhaler devised by him, the chief peculiarity of which consists in the large size of the tubes, which are nearly half an inch in internal diameter throughout. The proportion of aniline was a drachm to an ounce of the oil of eucalyptus or aniseed. The first night, after taking ten deep inhalations, the quantity of expectoration diminished to one half, and it was white, instead of green, there being but little pus mixed with it. Just at first the patient did not bear the treatment well, the meat powder producing sickness, and the eucalyptus appearing to irritate the air-passages. The meat powder was for a time therefore administered in enemata, two tablespoonfuls in a pint of milk being injected twice a day. Ten grains of acetanilide were given four or five times a day. Three minutes after each of these doses the cough was allayed, and the patient felt better. In this way the temperature was kept down to normal.

After about a fortnight the patient liked the inhalations so much that the inhaler was seldom out of her hands. She took from ten to thirty inhalations at a time; during the whole day she would take on an average about 400, the mixture generally used being an ounce of eucalyptus oil together with a drachm of aniline. Iodine or iodoform ointment, to which eucalyptus oil had been added, was rubbed into the chest, and fly-blisters applied between the shoulder-blades. One striking result of the treatment must be mentioned, viz., a blue, cyanotic-looking coloration, which affected the whole of the skin and mucous membranes, and which was probably due more to the large doses of acetanilide (which breaks up into aniline and other products) than to the inhalation of aniline. It passed off completely in two days, during which the aniline inhalations were stopped and the doses of acetanilide diminished. Three weeks from the commencement of the treatment the general condition had decidedly improved: the patient was able to take eight tablespoonfuls of the meat powder with kwass (a mucilaginous drink) and lemonade daily; the cough had decreased; the expectoration had not only diminished in quantity, but was almost free from pus. The treatment was persisted in throughout the winter, the bacilli in the sputum showing by their diminishing numbers the improvement in the patient's condition. At the end of the winter the râles had disappeared from the left apex, and the cavities in the infra-clavicular region could scarcely be detected. The rest of the lung was unchanged. The dyspnœa had quite ceased. At the commencement of the summer of 1887 the patient was stronger and better than she had been for four years. During the summer the inhalations were stopped and the meat powder given but seldom; the acetanilide was, however, given all through in doses of ten grains two or three times a day. During the year no less than 4lb. of acetanilide had been taken and many ounces of aniline inhaled.

Since the autumn of 1887 the cough and expectoration have increased again, but the temperature keeps down and the strength and general condition are good. The eucalyptus inhalations have not appeared to suit the patient so well this winter as they did last year, so that another mixture is now used in the inhaler, viz., ol. menth. pip., 2 dr.; ol. anilini, 1 dr.; aq. dest., 1 oz. The author has employed aniline inhalations in many cases of chronic phthisis, chiefly amongst the poor, and has never seen any sign of aniline poisoning, the good results of the treatment having, on the other hand, rapidly made themselves manifest.

Dr. P. Bertalero[1] uses with his patients aniline extracted from coal, and not that derived from nitro-benzine. He selects for treatment those patients who inherit tuberculosis and in whose sputa Koch's bacilli are present. While under this treatment no other medicament is employed.

Of the eight patients, four were in the first stages of tuberculosis, three were at the commencement of the second stage, and one was apparently moribund.

The results were splendid in the first four cases, the lesions disappearing com-

[1] Gaz., deg. Ospedali, No. 96; *L'Union Méd.* March 8, 1888.

pletely in about two months by the daily dose of 9 to 10 grains of aniline internally and 15 grains daily by inhalation. The treatment should last two or three months and should be interrupted several days each month as the system acquires a toleration for the drug. The other cases were very much improved. The experimenter proposes to employ the drug hypodermically and perhaps by parenchymatous injection into the lung.

Cyanide of Mercury in Diphtheria in Sweden.—Dr. H. Selldén, a Swedish provincial medical officer, considers that he is warranted by the results obtained both by himself and numerous colleagues in the treatment of diphtheria by cyanide of mercury in looking upon this drug almost as a specific. During the four years 1879–1882 the official returns of the sickness in the district of Norberg show that 564 persons were attacked by diphtheria, of whom 523 died, a mortality of 92.7 per cent., none of these being treated by cyanide of mercury. During the years 1883–1886, 160 persons suffered from the disease, and of this number 29 died; 132 of these 160 cases had been treated by cyanide of mercury, and of these 132 only one died. Is it possible, asks Dr. Selldén, that this startling difference in the mortality can have been due either to accident or to mistaken diagnosis? On the latter point he assures us that all the 132 cases were well marked with distinct pseudo-membrane, swelling of the glands, extremely foul breath, and all the signs of diphtheria which were present in the other and more fatal group of cases. Up to the commencement of the present year Dr. Selldén has treated more than 200 cases of diphtheria with cyanide of mercury, and of these only four have died, three of whom were seen by him too late for much good to be expected from any treatment. He and his colleagues have altogether treated more than 1,400 cases in this way, with a total mortality of 69, or about 4.9 per cent. As to the mode in which the cyanide acts, he suggests that by giving oft-repeated small doses the body becomes rapidly so impregnated with mercury that the diphtheria bacilli are unable to move upon it; indeed, he believes that by means of such doses one might allow one's self to be inoculated with diphtheria bacilli with impunity. The formula he recommends is as follows: Cyanide of mercury, gr. $\frac{1}{8}$; tincture of aconite, 15 minims; honey, 3 xiii.; mix and give a teaspoonful every fifteen, thirty, or sixty minutes, according to the patient's age. No brushing of the throat is practised. A gargle is prescribed to be used every fifteen minutes, composed of cyanide of mercury in peppermint water, in the proportion of 1 to 10,000. Occasionally, where the cyanide of mercury has not appeared to act as quickly as usual, recourse has been had to the biniodide, with satisfactory results. Dr. Selldén thinks it probable that the subchloride and perchloride may also act in some cases better than the cyanide.—*Lancet*, March 24, 1888.

Horn (J. E.) on Peculiar Effects from the Application of a Belladonna Plaster.—In a case of obscure injury to the shoulder joint, occurring in a woman of 54, much pain and tenderness persisted about the joint and in the arm, and the physician thought an anodyne plaster would relieve this soreness, and gave her a belladonna plaster, four by eight inches in size. It was on about thirty hours, and because of the burning it produced the patient removed it, and a vesicated spot the size of the plaster was visible. Two days later the denuded surface was of a deep, angry-red, and scarlet hue extending from its edges in every direction. The arm was swollen all the skin would hold from shoulder to elbow, even extending to the fingers and hand, but not so great below the elbow. In fact, there was an extensive inflammation almost resembling erysipelas. The patient complained of dryness of the throat, and had double vision. The inflammation remained about one thing for three days, and then began to gradually subside.

The symptoms of belladonna poisoning soon passed off.—*Cincin. Lancet-Clinic*, March 31, 1888.

Hare (H. A.) and Marshal (J.) on the Physiological Effect of the Empyreumatic Oil of Coffee or Caffeon.—The experimenters have found that caffeon increases the pulse-rate by direct cardiac stimulation in small doses, and lowers pulse-rate by its cardiac action in large doses. On the highly developed spinal cord of the frog it causes increased reflex excitability, but on the mammal, with a well developed brain, drowsiness and sleep. The action of the oil is not as powerful as that of caffeine.—*Med. News.*, March 31, 1888.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital.

VOL. V., NO. 16. April 19, 1888. WHOLE NO. 64.

CONTENTS.

	PAGE
Leading Article	185
Surgery	187
Therapeutics	190
Pathology	194

LEADING ARTICLE.

Hartshorne (H.) on the Past and Present Mortality and Treatment of Pneumonia.—This paper, which is the result of the clinical experience and close reading of forty years, has the true ring to it and it is to be deprecated that the limits of this journal forbid its presentation in full.

The author says that between 1845 and 1855 the accepted treatment of pneumonia was what was then called moderately antiphlogistic; including early and moderate abstraction of blood in patients of good strength and not over middle age, early purgation with some active cathartic, and then the use of agents, chiefly mineral salts, to promote and maintain the action of the skin, kidneys, and bowels; little opium was given except late in the late stage, and quinine was reserved for that period as a tonic. Alcohol was only given in cases of exceptional prostration, in aged patients or in those of enfeebled constitution.

From 1855 to 1860 a reaction set in against blood-letting, and alcohol was used early and freely in all cases. Next came the era of physiological rationalism, characterized by the abandonment of all previous methods and the substitution of various antipyretic drugs and methods of treatment.

To-day the predominant method of treatment of pneumonia may be said to be characterized by the following features: 1, the practically universal omission of venesection, and the very rare local abstraction of blood; 2, the general disuse of active cathartic medicines in the early stage; 3, by many, perhaps a majority of physicians, the early and continued use of alcohol, to the extent of from 2 to 12 or more fluid-ounces in 24 hours; quinine, mostly in 10- or 20-grain doses, once or twice daily; opium, or morphia, from the start or near it, averaging perhaps sulphate of morphia gr. $\frac{1}{12}$ to gr. $\frac{1}{8}$ every 3 or 4 hours; with deviations from this general plan, or additions to it, by the use of antipyrin, antifebrin, aconite, digitalis, etc.; and warm applications, as poultices, or cotton batting to the chest, or counter-irritation with turpentine, etc. These last may be said to be common to the old and the new methods of treatment.

As to the recent and present mortality of the disease, we find it editorially stated in the *Medical News* of December 11, 1886, that "the rate of mortality" of pneumonia "in the large general hospitals in this country is rarely below, more often above, 25 per cent., which represents about the average death-rate from this disease in the Northern and Southern armies during the civil war." It is added, that "in this country extensive statistics of pneumonia in private practice are not available; but in the recent returns of the Collective Investigation Committee of the British Medical Association, the mortality was 18 per cent." This last ratio, it will be perceived, is considerably more than double the carefully computed mortality of pneumonia before 1858, namely, 8.33 per cent. We have thus, I think, a *demonstration* of the large increase in the proportion of deaths from that disease in recent times, over what it was thirty, forty, and fifty years ago.

From all considerations we are led at last to the conclusion, that the change in practice that has been referred to has no other origin than a fluctuation of opinion, not justified by facts or reasoning, concerning certain principles in therapeutics. This fluctuation involves:

1. A depreciation of the value of the early abstraction of a moderate amount of blood, locally or by venesection, for the relief of active inflammation, in persons of good previous health and not advanced in age.

2. A like depreciation of the utility of early catharsis, especially as an eliminative agency, to prevent the accumulation in the system of the products of regressive metamorphosis of the tissues.

3. The same want exists of due valuation of salines, formerly called refrigerant medicines, for lowering blood-pressure and promoting the functional activity of the skin and kidneys, as well as the bowels.

4. An erroneous, exaggerated estimate prevails of the beneficial influence of large doses of quinine, employed for the reduction of temperature. Testimony is accumulating as to the failure of the use of quinine in antipyretic doses in the treatment of pneumonia.

5. An especially injurious error consists in the administration of opium and morphia at an early stage of pulmonary inflammation. The tendency of opiates to *diminish bronchial secretion* stands right in the way of their utility in pneumonia. I may here recall the statistical fact, that in the reports of results of different modes of treatment before 1858, the worst record of all was attached to the opium treatment of pneumonia.

6. An experimental administration is being carried on of antipyrin, antifebrin, etc., as antipyretics, whose results do not correspond with what is desired of them as remedies for acute organic inflammation. They have another rôle, as neurotic medicines, in which they possess much value. I may remark incidentally, as an example, that in Dr. Pepper's interesting case, reported in the *Medical and Surgical Reporter* early in last year, it appears to me probable that it was the *neurotic* element in the case —the strongly marked tendency to convulsions—that received benefit from the antipyrin used rather than the pneumonia itself.

7. The practical ignoring must be noticed, in recent therapeutics, of the important difference between the debility of *oppression* in the early period of severe attacks of acute disease and the *exhaustion* which belongs to a later stage of the same, or which is produced by some other causes and conditions. The *treatment* of these two states, as was long ago recognized, is properly quite different.

8. Connected with this, the early and free use of alcohol is now common. In my judgment, except in previously enfeebled patients or those otherwise exceptionally prostrate, this is an injurious medication in pneumonia. Heart-failure during the early stage, in patients of previously good health, may be best averted by so lightening the burden of oppression imposed upon the heart, as to make it possible for it to carry its load without exhaustion. It is under a prevailing so-called "supporting" treatment that not a few men in the prime of life have, within a few years, dropped off under less than a week's illness with pneumonia.

The relief often afforded by bleeding, without consequent exhaustion, even at a somewhat late stage, to the condition characterized by distention of the right heart (this being a practice approved even by many physicians who are otherwise opposed to blood-letting), should be remembered and set over against the excessive fear entertained by some, of the production of debility by early bleeding.

I conclude, then, that there is reason for the judgment that the now current "working theory" of the treatment of pneumonia and allied affections, by early and continued stimulation and narcotism, is not supported by the facts concerning the results of that treatment, as compared with those of the *moderate, early*, sedative, and eliminative practice of forty or fifty years ago.

I do not assert that venesection is called for in nearly all cases; but I believe that early local depletion will do good in the majority, in patients not old, and who were previously in good health; and that early active catharsis, with diaphoretics and diuretics afterward, are rightly in place: quinine as a tonic, and alcohol as a stimulant, being indicated only exceptionally at the beginning, in persons of low vitality or bad habits or old age; more often, when real exhaustion is imminent, at a late stage.

There is more room for question, on the

basis of experience, between the older practice and pure expectancy, nursing the patient in bed without medication, than there is between the therapeutic methods now current, in regard to acute inflammatory affections, and those of the early part of this century. We want only to replace in their position of confidence, lost for a time, some of those measures of practice which have been abundantly tested and commended by the experience of ages.—*Medical News*, April 7, 1888.

SURGERY.

Richet on Fracture of the Inferior Maxilla, with Putrid Infection, and Death.—A man of 50 entered the Hôtel Dieu in the early part of December, 1887, to be treated for various traumatisms received while drunk. Among other injuries he had a compound fracture of the lower jaw, near the median line, accompanied with such laceration of mucous membrane and periosteum that the bone was freely exposed to the various buccal secretions and also the air.

The day after admission the patient was seized with delirium tremens of such violence that mechanical restraint and opium had to be resorted to. The patient was in such an agitated state that perfect coaptation of the fragments was impossible, and partial immobility was secured by passing a silver wire about the teeth. Frequent lotions of chlorinated water were used. In a few days an abscess formed in the subhyoid region and from it pus escaped into the mouth by a sinus opening in the gingivo-lingual space near the fracture. Richet thought the condition of the patient did not warrant an external incision, drainage, and proper antisepsis, so he contented himself with intrabuccal lotions of boracic acid.

December 20th an ecchymotic enlargement appeared on the external surface of the right leg. A large abscess ensued, which was opened, drained, and disinfected. It contained thin, bloody pus.

A cough next developed with abundant greenish expectoration and physical signs of broncho-pneumonia and perhaps abscess. The temperature was never higher than 100.5° and oscillated generally between 96° and 99°, with considerable regularity. No chills were noticed. He died Jan. 15, 1888.

At the autopsy the liver, spleen, heart and intestines showed no abnormalities; the right lung contained miliary abscesses. In the left lung many small purulent foci were crowded together, but there was no real pneumonia, no inflammatory lesions being discovered.

Richet considered this a case of putrid infection or intoxication, the starting-point of the infectious process being the absorption of pathogenic bacteria from the mouth.

A similar case occurred in Velpeau's practice. Velpeau opened the submascillary abscess, but the patient, a healthy y ·1 countryman, neglected the use of antiseptic mouth-washes, and swallowed the discharges with his saliva. He emaciated, had diarrhœa and irregular chills, and finally died. In this case the Peyer's patches and other parts of the intestines were ulcerated and broken down.—*La France Méd.*, Feb. 14, 1888.

James (F. L.) on Injections of Quinine in Gonorrhœa and Cystitis.—In acute or chronic cases of gonorrhœa the author employs an injection prepared as follows:

℞	Sulphate of quinine . . .	ʒ ss.
	Sulphate ofmorphine, . .	gr. viii.
	Mucilage of acacia, . . .	℥ iss.
	Water to make	ʒ viii. ℿ.

In cases of cystitis he employs an injection composed of sulphate of quinine ʒ i., mucilage ℥ iv., tepid water to make O ii. Some of this he gets into the bladder by means of simple gravitation, having the liquid in a reservoir four or five feet above the patient, who squats on his heels, leans back against the wall and separates the knees as widely as possible, inserting the nozzle of the apparatus into the urethra and holding it there until the bladder is distended. The injected material is evacuated in the ordinary manner. For the mucilage the author usually substitutes freshly made slippery-elm water.

For chordee the author gives 20 minims of the tincture of veratrum viride on retiring.—*St. Louis Med. and Surg. Jour.*, April, 1888.

Fenger (C.) on a Case of Traumatic Cyst of the Pancreas.—A boy of eight fell from a horse and sustained an injury to the abdomen. For the following eight weeks he complained of intermittent attacks of pain located about the umbilicus. About three weeks after the injury a steadily increasing swelling appeared in

the epigastrium. Anorexia, vomiting, and irregular looseness of the bowels, with fæces of a whitish curdled appearance. The tumor was tapped and found to contain a deep straw-colored fluid of alkaline reaction with no other formed elements except a few blood corpuscles.

A primary laparotomy was made, exposing the tumor, and a week later the pancreatic cyst was opened and drained. It was found to contain 40 ounces of fluid. The patient left the hospital twenty-three days after the last operation, having a fistula about three inches deep with almost no discharge.

The author gives a table containing all the cases of cyst of the pancreas reported, eighteen in number, from which the following résumé may be drawn:

There were eleven males and seven females.

Age from eight years to forty-six years.

Trauma was given as the cause in three cases.

Duration from five weeks to thirteen years. In one case the time was indefinitely given as "some weeks."

Place of developement is not stated in five cases; in two cases the head is given as the seat of origin; in eleven cases the tail.

As to symptoms, a certain suddenness of onset is noticeable in a number of cases; otherwise, common gastric and intestinal disturbances seem to be most prominent. Location, relations, etc., of tumor has only in a limited number of cases been sufficiently characteristic to warrant a diagnois of pancreatic cyst.

Icterus is mentioned as a complication in four cases. Diabetes in one case.

Sixteen cases were operated upon, of which ten recovered, five died, and one result was not recorded.

Extirpation of the whole cyst: three cases with two deaths and one recovery.

Partial excision of cyst-wall, uniting the remainder with the abdominal wound: two cases with two deaths.

Puncture and aspiration: one case with one death.

Incision and drainage at one time: four cases with four recoveries.

Incision and drainage at different times: five cases with[1] five recoveries.

[1] Bull's case was operated July 19th, discharged cured November 19th, but died two weeks later from diabetes.

From the above figures it seems reasonable to conclude, as Dr. Senn stated in his monograph of 1885, that the operation to be recommended for cysts of the pancreas should be incision and drainage.

The cyst-fluid has proved itself able to digest starch, emulsify fat, etc., and thereby establish its pancreatic origin. In two cases a digestion eczema was noticed around the abdominal wound. The quantity of the cyst-fluid varies from a pint up to several quarts. Blood in varying quantity is frequently found in these cysts. Küster considers the presence of blood characteristic, even for pancreatic cysts, when found in a cyst of the upper abdominal region (Hagenback). In two cases, blood was prevalent to such an extent as to possibly make it more correct to place them among hæmatomas. Senn, however, thinks it safe to classify them as hemorrhagic retention-cysts.—*Med. Jour. and Examiner*, Feb., 1888.

[In the *Chicago Med. Jour. and Examiner* for April, 1888, Dr. D. A. K. Steele reports a somewhat similar case having the following points of interest.

1. Its traumatic origin, being noticed a few months after a severe contusion of the body and a compression of the pancreatic region between cars.

2. Its slow growth and great size, without marked impairment of health, due probably to its originating in the tail of the pancreas; the growth extending over thirteen years (equal to the longest on record), and containing four and one half gallons of fluid.

3. Its walls being lined with calculous incrustation, and raising the question as to whether its origin might not be due to an impacted calculus in the common duct.

4. Incision and drainage through the anterior abdominal wall not being followed by collapse and contraction of the cyst at the end of three and one half months, raises the question of the advisability of through-and-through drainage, or excision of a part of the sac.]

Keen (W. W.) on a Case of Radical Cure of Hydrocele by Excision of the Tunica Vaginalis Testis.—The patient was a man of sixty-three, having a hydrocle of three years' standing. The tumor was as large as a good-sized orange. An incision was made the whole length of the tumor. The hemorrhage from the scrotum was quite free, but was easily con-

trolled by hemostatic forceps, and eventually no vessel required ligation. The sac was then incised, when its liquid contents at once escaped, and the edges of the sac were seized on each side by hemostatic forceps. By means of the fingers and the closed points of a probe-pointed pair of scissors, the tunica vaginalis was then dissected from the surrounding tissues of the scrotum, until its attachment to the cord and testis was reached. The loose tunica vaginalis was then cut off close to the testis and cord, and the wound was accurately closed by five sutures, horse-hair drainage being provided. No hemorrhage of importance occurred from the sac during its dissection.

Strict antiseptic precautions were used (but no spray), carbolic acid 1:24 for the instruments, and bichloride of mercury, 1:1000, for the hands, sponges, etc. A sublimate gauze dressing was then applied and retained by a broad T-bandage, the abdomino-scrotal portion being triangular in shape, with an aperture for the penis.

Beyond the slight pain on the evening after the operation, the patient suffered no inconvenience, except that incident to confinement in bed. He was entirely well on the eleventh day, but for other reasons did not actually leave the hospital till the eighteenth day.

It would seem to be almost an impossibility that recurrence should take place after this operation, for practically none of the sac is left, and in so far it would be *à priori* the ideal radical operation.

This method facilitates the proper treatment of any additional lesion which may be present. As is usual after antiseptic wounds, there was little or no pain.

There is little inflammation, practically no fever, not a drop of pus, and no seeming possibility of gangrene. There are only moderate induration, weight, and tenderness.

Although a more radical operation than that of Volkmann, it is less painful and less dangerous. In two hundred and fifty-four cases collected by the writer in the *Medical News*, recurrence is noted in three, and two died of septicæmia and pyæmia, while abscess, sloughing, and orchitis have all occurred. Induration, weight, and tenderness have persisted from three to four weeks. The conditions after resection of the entire tunica vaginalis and immediate closure of the wound, with drainage and antiseptic dressing, are such as to favor the speediest and safest recovery, without any of the dangers above noted as following antiseptic incision.

Bergmann, Bramann, Bull, and Southam have successfully performed this operation. —*Med. News*, April 9, 1888.

Rawdon (H. G.) on a Case of Perityphlitic Abscess; Implication of Right Hip-Joint.—A boy of six and a half was admitted into the Liverpool Infirmary for Children, August 4, 1883, suffering from disease of right hip-joint, in connection with which was a large abscess. About six weeks before his admission (previous to which time he was in good health) he was seized with a series of convulsive fits, at least seven or eight, and extending over a period of three weeks. It was on his recovery that the boy was found unable to walk, and that he complained of pain about his hip and knee. On admission the patient was thin, sallow, and in poor condition. The slightest movement of the limb caused acute pain. At night his sleep was much disturbed by paroxysmal exacerbations.

On August 11th I excised the femoral head; the excision gave vent to the large collection of purulent matter occupying the upper and outer part of the thigh. The pus was of uniform consistence, thick, and of a grayish tinge, and had an offensive odor. The capsular and round ligaments had given way. I would here remark the excised head showed but little pathological change. The articular cartilage was discolored by staining, and in parts its surface was eroded. On section also, it was found that the cartilage was firmly adherent to the subjacent bone, and that the latter structure was apparently quite healthy. The boy was at once relieved by the operation, and he continued to go on fairly well for the first two months, notwithstanding the continuance of a somewhat free discharge. Subsequently, however, he lost rather than gained ground, though the reparation process in connection with the resected joint itself was satisfactory. At the end of four months, as the cure appeared to be hanging fire, I explored the condition of the parts, enlarging the sinuses so as to admit the finger. It was observable that the thigh, on its upper and inner aspect was enlarged. This enlargement gave an obscure sense of fluctuation, and I expected it would prove to be a deep-

seated collection of pus. As the finger could be pressed from the outer to the inner side without difficulty so as to reach the swelling referred to, before opening it I tried the effect of firmly squeezing the part, with the effect of slowly pressing out a large mass of firm fæcal matter (a fair-sized motion for a boy). The mass was about three and a half inches long and three quarters of an inch in diameter, and it probably was lying between the vastus internus and the adductor magnus. I was informed by the nurse that she had frequently noticed bubbles of air escaping from the outer sinus, and also pieces of gray-brownish matter. The fœtor was peculiarly offensive. The sinuses were washed out and drained, and the boy from this time made a slow but complete recovery.—*Med. Press*, March 28, 1888.

Page (H. W.) on the Treatment of Carbuncle by Scraping.—The patient is anæsthetized, and if the slough has not already begun to boil through openings in the skin, incisions are made into the parts beneath, and then with the spoon you scrape out every particle of sloughing tissue, working down into the depths, going from part to part, controlling by gentle pressure any venous oozing there may be here while you are scraping there, until the whole slough is cleared out; and such skin as seems to be dead, blue, or bloodless you may cut away with knife or scissors, although it is marvellous how much of apparently worthless skin will return to life, and had better be preserved. Then, having well irrigated the large open wound with perchloride or carbolic lotion, you dust iodoform over it, bandage upon it with some pressure wood-wool pads, and the procedure, which hardly deserves the name of operation, and which has not taken many minutes, is at an end.—*Br. Med. Jour.*, March 24, 1888.

[Ruston Parker says[1] that while neither erasion nor excision is by itself a panacea for all carbuncles, the two processes combined or selected are applicable to every case, not as a matter of mere novelty or variety, but as the most effectual treatment that we can adopt, if not put off too late. Not that I doubt that many carbuncles are capable of recovery under expectant treatment, which differs little from no treatment. I am perfectly sure that all are exceedingly benefited by local extirpation; and if it be that any of them are likely, if too prolonged, to end in fatal septicæma or pyæmia, that disaster is undoubtedly averted by the operation performed.]

[1] *Br. Med. Jour.*, March 31, 1888.

THERAPEUTICS.

Some Recent Contributions to the Study of Antipyrin.—Chouppe, we believe, first asserted that antipyrin was capable of relieving uterine pains after parturition or dysmenorrhœa. In *Le Praticien* for March, 1888, Queirel, of Marseilles, announces that he employs hypodermic injections of 5 grains of antipyrin, during labor. The medicine acts in twenty-five minutes, and relieves or diminishes the pain without interfering in any way with the labor.

Laget (quoted in *Therapeutic Gazette*, March 15, 1888), in a case where severe labor pains came on in the fifth month of pregnancy, prescribed an enema containing 30 grains of antipyrin, with the result of relieving the pains slightly. An hour later a similar dose was given, which relieved the pains to a great extent. The uterine contractions continued, however, and in three hours the fœtus was expelled. The patient had no after-pains, and convalesced normally.

Netter testifies also to the fact that antipyrin relieves the pain, but does not diminish the force, of uterine contractions.

In the *Lyon Médical*, of Feb. 19, 1888, Dr. Mollière draws some unfavorable comparisons between the results of the treatment of typhoid fever by cold bathing and antipyrin. In eighty-five unselected cases treated by the cold bath, there were nine deaths, constituting a mortality of 10.5 per cent. Twenty-seven light cases treated by ordinary hydro-therapeutic methods gave a mortality of 7.4 per cent. In fourteen cases, of which four were of the lightest variety, antipyrin alone was used, with a mortality of 14.2 per cent. Throwing out the four light cases, which would have recovered under any treatment, the mortality is raised to 20 per cent.

The author maintains that antipyrin, even in moderate doses, produces toxic effects, which should continually be watched for. He has often seen icterus, stupor, and the characteristic eruption, follow its administration, and other symptoms resembling

those produced by carbolic acid, which has been justly discarded in the treatment of typhoid fever. He holds the remedy responsible for death in two of his cases.

Dr. L. C. Armstrong,[1] of Taylorville, Ill., has seen alarming collapse follow the administration of 20 grains of antipyrin in a case of puerperal fever. The patient, however, soon responded to stimulants and atropin.

Barr (*Lancet*, Feb. 25, 1885; *Med. News*, April 7, 1888) reports a case of collapse and death following the ingestion of from 15 to 30 grains of antipyrin in two doses. It was a case of puerperal fever, in which the antipyrin produced a fall in the temperature of about six degrees, with vomiting and diarrhœa. Rigors now came on, the extremities became livid, and in thirty-two hours the patient died in syncope. At the autopsy the spleen was found contracted and kidneys shrunken, containing infarctions.

According to Sée *L'Union Médicale*, Feb. 16, 1888, toxic effects following the administration of antipyrin are extremely rare. They occur, according to him, once in every twelve or fifteen cases among women, and once in fifty cases among men.

Dujardin-Beaumetz states that he has very seldom seen a rash from the administration of the drug, but, on the other hand, has observed quite frequently disturbances of digestion in cases taking the medicine for a considerable time. He suggests that these disagreeble effects may be produced by the benzine which is employed in the preparation of the drug.

Dr. S. Peters,[2] of Cohoes, prescribed two 10-grain powders of antipyrin for a severe headache occurring in a woman of twenty-five, otherwise healthy. A few minutes after the administration of the first dose, she experienced a "snapping" in her head, along with an itching and burning in the roof of the mouth and in the throat. This feeling also extended to the eyes, nose, and ears, and increased in intensity till she became almost frantic. Sneezing soon commenced and became extremely violent, while the nose and eyes were discharging a very copious watery fluid. She could not breathe through the nostrils for several hours. Exhausted, she finally fell asleep, but recovery was not perfect till the next day.

The *Medical Press*, March 14, 1888, editorially says that antipyrin should be administered with, or immediately after, a meal, otherwise pain, nausea, and discomfort may result from its contact with the walls of the stomach.

In the same journal Huchard recommends antipyrin very highly in the treatment of polyuria. A patient of his drank large quantities of liquid, and passed in twenty-four hours more than twenty quarts of water. Antipyrin was given up to two drachms in twenty-four hours, and the result was a rapid decrease in the amount of urine, until three quarts daily were reached.

This effect of antipyrin upon the secretion of urine renders it unfit for administration in certain diseases of the kidneys where their secreting function is already impaired. While antipyrin eases the pain in the neuralgic form of angina pectoris, it would be dangerous to give it in true angina with stenosis of the coronary arteries, as collapse of the heart might result.

Guttmann (quoted by *New York Medical Journal*, March 24, 1888) has seen antipyrin in one case cause violent palpitations, intense cyanosis, and a feeling of the want of air. In another case there was great excitement (pulse 132), with œdema, amaurosis, together with pruritus and urticaria. The dose given was fifteen grains.

Dr. J. P. C. Griffith[3] agrees with Sonnenberger that antipyrin is very efficient when given early in whooping-cough. Neither of them, however, claims a specific action of the drug. In only one case does the author report a total failure of the drug. He gives small doses at frequent intervals.

Thör (quoted by *Med. and Surg. Rep.*, March 31, 1888) finds antipyrin an excellent substitute for bromide of potash in nocturnal emissions. He prescribes from seven to fifteen grains just before going to bed.

Laurencin[4] claims rapid recovery in the severe form of chorea by the administration of nine- to fifteen-grain doses of antipyrin.

Ollivier, on the other hand, does not share the enthusiasm of certain observers concerning the efficiency of this remedy in chorea, having used it on children of seven to eight years of age in daily quantities of

[1] *Weekly Med. Rev.*, March 10, 1888.
[2] *Med. Register*, March 24, 1888.
[3] *Lyon Médical*, March 11, 1888.
[4] *Therap. Gaz.*, February 15, 1888.

one drachm, without modifying in the least the symptoms.

Dr. W. M. Powell, of Albany, Texas,[1] testifies as to the local hemostatic power of antipyrin, having entirely checked serious hemorrhage by the application of a four-per-cent. solution of the drug in a case of circumcision, and in the bleeding following an injury to an old ulcer of the leg.

Hutchins (J. T.) on Veratrum in Pneumonia in Children.—I had occasion to test the worth of veratrum in a case of pneumonia recently in a girl, age eleven years, with an acute attack of the right lung. She had been suffering three days before I called to see her. I saw her first in the morning. She was then very restless, with a hot, dry skin, cheeks flushed, pulse full but frequent, temperature high, respiration hurried and accompanied with the usual characteristic nervous cough. I directed a blister to the side over seat of pain, and gave a dose of calomel. I then began at once with the veratrum, not a seven-drop dose, as the doctor suggested, but five-sixths-of-a-drop, giving it myself the first day every half-hour or hour, as I thought best, in a teaspoonful of cold water, until I had administered seven drops of the tincture of veratrum. The admirable effects of the drug in this case were plainly seen in calming the patient, in exciting the skin to a gentle perspiration, and lowering the temperature. It brought the pulse down to the normal volume. It diminished the respiration and lessened the nervous cough. Suffice it to say, the veratrum was continued from my first day's visit up to the eleventh day of illness in five sixths of a drop dose every hour, whenever the febrile movement was heightened or highly flushed cheeks were noted.

On the twelfth day the stage of resolution set in, with a steady improvement thence on with my patient. In this case I used no quinine, but gave veratrum preference, with the view of testing its merits.—*Daniel's Tex. Med. Jour.*, March, 1888.

When to Give Digitalis.—It has been observed that he who discovered and laid down rules for the administration of digitalis would be doing infinitely greater service to the profession than they who encumber therapeutics with new and untried though much belauded "cardiac tonics." There are difficulties in the way of any comprehensive directions for the employment of this drug, because it is sometimes observed clinically to produce distinctly beneficial results in cases where theoretically its effects are contra-indicated. Dr. James Stewart has recently suggested a sign of value which we commend to practitioners. He points out that in cases of heart failure too pronounced to allow of resort to alternate methods of treatment involving exercise, the best results are obtained by rest in bed with full doses of digitalis, the supply of liquids being curtailed to the minimum. The first marked effect of cardiac failure is a fall in the aortic blood pressure, leading to diminished excretion of urine and a lowering in the vital processes generally. The diuretic power of digitalis is directly dependent on its influence in restoring the diminished pressure, and to effect this the drug must be given in full doses. The important fact to bear in mind is that when the amount of urine falls, after inc easing, under digitalis, the administration of the drug should at once be suspended. The failure in the renal excretion may be taken to indicate that the heart is incapable of reacting further to the stimulus, and serious risk attends non-attention to this rule. The amount of the drug and the time required to bring about this secondary fall varies greatly according to the susceptibility of the individual to its effects. Forty minims of the tincture four times daily for three days is generally sufficient, but as much as half an ounce daily in divided doses is sometimes required. Scillin and mercury are both direct diuretics. Caffeine is another useful diuretic, and a combination of caffeine with digitalis is very highly spoken of. In these observations we have several points of practical importance in the treatment of a very difficult class of cases.—*Medical Press*, March 21, 1888.

Farrell (A. J.) on the Abandonment of Calomel by the Profession.—The difference in climate and consequent difference in type of disease, and the different class of diseases prevailing in different climates, influence largely the treatment necessary for their relief. In 1877–8 I did some practice in the mountains of Western N. C., and rarely saw a case in which I thought calomel absolutely necessary, though I sometimes prescribed it as a convenient purgative, and saw no harm result.

[1] *Daniel's Texas Med. Jour.*, March, 1888.

From what I saw there, being only a medical student at that time, I think it might be dispensed with in the majority of cases in that country; and the same conditions may exist around Marietta, Ga.

I came to Texas early in 1879, with the belief that calomel was "not much of a medicine," but a few months in the Trinity River bottoms taught me that in order to cure my patients safely, quickly, and pleasantly, calomel was necessary in a good many cases, and in some cases absolutely necessary in order to save life. I say this because I tried all the other remedies at my command without relief, and then used calomel with success.

I am as certain as I am of any thing in medicine, that I have saved life, shortened the course of diseases that would otherwise have proved long and painful, and aborted many attacks in their incipiency with calomel.

I refer chiefly to the malarial diseases of this southern country as requiring calomel, but it is useful and perhaps necessary in many other conditions, but as they are well known it is unnecessary to mention them. Let me say, however, that I have never had a case of puerperal peritonitis develop under my care; at the first symptoms I give calomel, opium, and quinine.

I have never used it in syphilis; having always practised in the country I have seen but few cases, and these were not in a condition calling for mercury. I should use it in some cases, no doubt, but should not expect to cure that or any thing else with calomel alone. It will be in order to attempt this when we have no other remedy.

But what of its bad effects? I have given, probably, several thousand doses (I have no idea how many), and have salivated only one patient. This was a case of congestive fever, and I don't think I could have saved the patient without the calomel.

The salivation, under the circumstances, was unavoidable; but no appreciable harm resulted, except the pain and discomfort for five or six days.

I have seen some persons who have been greatly injured by calomel—but none that have occurred within the last ten years, and nearly all of these were in the hands of quacks.—*Medical Brief*, April, 1888.

Records (B. F.) on Asclepias Syriaca (Milkweed) for Lumbago.—I have a remedy for lumbago that never failed me since I began using it in 1873, and that is a decoction of *Asclepias Syriaca*, or "silk-weed," "milkweed," as it is called. The root is the part used, and may be dug any time from August until April. Its physiological action seems to be diuretic, and mildly laxative. It increases digestion, and stimulates the appetite. That is as far as I have observed its action. I believe it is to some extent a heart tonic, though of that I am not positive as yet.

In 1873, I had a severe lumbago, for which I had tried various remedies, both internal and local, including electricity; but without relief. An old farmer said he could cure me, and related his own experience, and furnished the roots. I began using a decoction, drinking a half teacupful four or five times daily, and in a few days was completely relieved. Then I recommended it to all my patrons who called for treatment, and heard from them the most extravagant praises of its virtues, in return for my suggestions. Amongst my first cases was a man about fifty-eight years old, a painter, who had been disabled from work for nearly a month. He said that when he attempted to arise of mornings he had to roll out of bed on the floor, and hold to the bed-post with one hand, while attempting to pull on his pantaloons with the other. He could not stand still, but had to keep moving constantly until he could get to a seat. I gave him some of the roots, and he used the tea through the day, and next morning got out of bed and dressed with but little pain, and in a week was able to resume his trade. Since then I have met and treated perhaps a hundred cases with like results.

In 1875 or 1876 I had a typical case of general anasarca, in a man sixty-five years old. He had heart disease badly. His case grew from bad to worse, baffling me with the best remedies I could find. The anasarca had extended up to the thorax. He could not lie down. His body and limbs were distended until the skin seemed ready to burst. I regarded his case as hopeless, but concluded to give the silk-weed a trial. I punctured his limbs in numerous places, and wrapped them in cloths, and thus started a flow of the water. I put him on a free use of the tea, and in ten days he was reduced to a mere skeleton; but could lie down and sleep comfortably. His appetite returned; his bowels from being torpid acted normally, and there was a constant healthy action of the kidneys.

His heart's action became more regular and its impulse strong. He lived a year and a half happy and content, when his heart suddenly failed, and he died in a few hours. I have used the same remedy in a few similar cases since, and it has proved the best of all remedies so far.—*Med. and Surg. Reporter*, March 31, 1888.

Dujardin-Beaumetz on the Results of Pasteur's Treatment of Hydrophobia among Individuals Bitten in the Department of the Seine.—Three hundred and six persons presented themselves at the laboratory of Pasteur during the year 1887. Of this number 44 were bitten by animals plainly demonstrated to be hydrophobic by inoculation experiments; 199 were bitten by animals which were for various reasons not subjected to experiment, but which were stated to be rabid by a certificate of a veterinary physician; and, finally, 43 were bitten by animals about which no knowledge could be obtained. Among these 306 victims, there were two deaths; ignoring the 43 cases bitten by unknown dogs there remain 263 persons bitten by animals known to be rabid. Of these, two died, showing a mortality .76 %.

Of 44 cases reported by the police not treated at Pasteur's laboratory, 7 died, giving a mortality of 15.9 %.

The two fatal cases observed at Pasteur's laboratory were persons who did not follow treatment regularly. One was a drunkard, the other a woman who lived so far from the laboratory that she could not submit to morning and afternoon inoculations, which were necessary because of the violence of the animal, the cat, which had bitten her.—*La Thérapeutique Contemporaine*, March 23, 1888.

Richard on the Treatment of Typhoid Fever by Cold Baths.—The author first quotes statistics of Viger, an army surgeon who treated thirty-six cases of typhoid fever by cold baths, with two deaths (one of which was from syncope at the commencement of convalescence), mortality 5.5 %. Viger, however, used intestinal antisepsis by means of sulpho-carbonated water, iodoform, and naphtalin, and used quinine from time to time. The author himself in seventy-six cases of typhoid fever, treated thirty-eight by ordinary methods and thirty-eight by baths. Of the former, four died—a mortality of 10 %; of the later, two died—a mortality of 5.25 %.

Of the cases treated by the bath, many were bad, some were very bad. Nevertheless, delirium, stupor, and nocturnal restlessness were observed among them. Insomnia was less obstinate. The patients nearly all maintained a lateral decubitus.

The periodical and considerable fall of temperature increased the flow of urine, consequently the elimination of poisonous matters from the blood; this action being augmented by making the patient drink a glass of cold water during the bath.

He does not consider the bronchitis of typhoid fever a contra-indication for the bath.—*L'Union Médicale*, March 27, 1888.

PATHOLOGY.

Chantemesse and Vidal on Inoculation against Typhoid Fever.—For some months the experimenters have studied, with an end to vaccination, the rôle of soluble substances produced by the typhoid bacillus, and isolated from the living virus.

Fresh mice seldom resist a dose of virulent typhoid culture, while mice which have been subjected to preventive treatment generally resist inoculation.

This treatment consists of a single inoculation of the soluble chemical element, elaborated by the typhoid bacillus.

The quantity of soluble material increases with the age of the culture.

The immunity appears only after some hours, and is effective for some time, the exact period being as yet undetermined.—*La Tribune Médicale*, March 18, 1888.

Charrin on Procedures Capable of Increasing the Resistance of the Organism to the Action of Microbes. It is well known that pyocyanine, a crystallizable chemical substance with precise reactions, is produced by a micro-organism.

The experiments of the author seem to show that the administration of this substance fortifies the system against the microbe which forms it. He filters the culture of bacilli at 115° C., and injects the sterile liquid obtained beneath the skin in doses of from 6 to 8 cc. repeated every three to five hours for six, eight, or ten times. The first few days that follow, the rabbits appear perfectly well. If healthy animals, and animals treated in the above manner, are inoculated with the same amount of virus, the former die as a

general thing in two to five days, while the latter survive, on an average of eleven experiments, fifty-one days. They succumb slowly, with paralytic symptoms, and their tissues at death are found to contain no bacilli.—*La Trib. Méd.*, March 4, 1888.

Welch (W. H.) on the Pathological Anatomy of Infectious Pleuro-Pneumonia of Cattle.—The disease is a contagious one, not spontaneous so far as is known, and always due to infection. The period of incubation varies from three weeks to three months, and it may be as long as six months. The onset is insidious. The animal begins to cough, its temperature becomes elevated, with loss of appetite, etc. Often much can be determined by physical signs when practised by experienced hands. Sometimes these acute symptoms subside and the disease passes into a chronic state. Again it may run a latent course and it is then not easily recognized. The disease is a fatal one, with an average mortality varying from 30 per cent. to 50 per cent. The distinguishing feature in the normal anatomy of the lungs of cattle is the connective tissue around the lobules. It is not abundant, but characterized by the looseness of its meshes. If the animal dies in the early stage of the disease we find in the lung one or more foci of inflammation. Sometimes the whole lung becomes affected. The affected portion is consolidated ; more or less of its elasticity is lost and it is friable. The pleura is always affected and in some cases a well-marked pleurisy is observed. A cut section shows a variety of appearances. Not only are the lobules affected, but the interstitial tissue also. Some lobules may be red, some gray, others dark, etc., and moving through this are bands of tissue. The early stage of the disease is marked by œdema, later it is red, and still later the appearance is gray. The interlobular tissue appears as broad bands due to its infiltration with serum and fibrin. The small bronchi are inflamed in the immediate vicinity of the inflamed area and contain muco-pus and fibrin. The microscope shows that the air cells are filled with the ordinary products of inflammation. In the interlobular tissue the lymph spaces are filled with large blocks of fibrillated fibrin. Emigration of white corpuscles does not penetrate deep into the interior. They are found to undergo coagulation-necrosis.

As regards the termination of the disease there is no proof that the lung ever reaches again its normal state. Sequestra form in the areas of inflammation, and fresh pleuro-pneumonia may set up from these. The formation of these sequestra always takes place in the interlobular tissue, and bands of tissue run into these, which correspond to the bronchi and blood-vessels. The sequestrum may disappear by invasion of granulation tissue from the outside, and the exterior becomes peculiarly worm-eaten in appearance. There is no proof that the disease affects other organs than the lungs.—*Jour. Am. Med. Ass'n*, March 31, 1888.

Girode on a Hard Chancre Implanted upon a Gingivitis Produced by Phosphorus.—The patient was a young woman of 22, of previously good health, who has worked three years in a match-factory, the hygienic arrangement of which was extremely bad. Ventilation was insufficient, temperature habitually high, and the air very smoky from the accidental combustion of packs of matches.

The women had the vicious habit of keeping at their place in the workshop their food and their drinking-cups. They ate and drank while working without washing their hands. Many of the women had a chronic gingivitis, were anæmic, complained of pains in the abdomen and diarrhœa. The promiscuous use of the drinking-cup is not without interest, considering the case in hand.

The disease which brought the patient to the hospital dated back about two months, and was developed in two stages.

At the commencement there existed an irritation of the gums and toothache, with a slight salivation, or rather frequent expectoration of a slightly purulent secretion. In three weeks the patient noticed upon the upper gum to the right of the median line, a bluish-red tumefaction, which soon became an ulcer with indurated edges, which progressively deepened, and exposed to a small extent the superior maxillary bone.

At the same time she noticed beneath the angle of the maxilla on the right side an indolent painless swelling. Later, she became troubled with nocturnal headache, a feverish feeling in the afternoon and during the night, and impaired nutrition. Two days before admission to the hospital

a red mocular eruption appeared upon the trunk; the eruption did not itch, and was discovered accidentally.

The patient improved under specific treatment, but insisted upon leaving the hospital before she was well.—*La France Médicale*, March 20, 1888.

Laurent (E.) on a Case of Simple Lymphangitis of the Penis, Followed by Suppuration.—A medical student of 22, on December 1st, after passing the night with a woman with whom he had three connections, noticed a sensation of weight in the penis. On examining the organ he perceived that the prepuce was a little red and painful. With difficulty he uncovered the glans, but when he did so, he felt in the substance of the upper part of the prepuce a small tumor the size of a bean.

In about four days the tumor, which had remained perfectly indolent, was the size of a grain of wheat. December 22d he had intercourse with the same woman, and the 23d the tumor became painful and of its former size. The surrounding tissues were red and slightly swollen. A hard smooth cord about 2 mm. in diameter started from the tumor and extended toward the root of the penis. Some enlarged glands were felt in the left groin, but the patient asserted that they were present before, and that they had simply become painful.

The woman was examined, and was found to have no trace of syphilis or gonorrhœa. The inflamed parts finally broke down and suppurated freely and quickly underwent normal cicatrization.—*Le Cour. Méd.*, March 3, 1888.

Berry (J. J.) on a Case of Circumscribed Œdema.[1]—The patient is a married lady of a very nervous temperament, about thirty years of age, mother of one child, ten years old. She has been out of health for several years, has chronic ovaritis and laceration of cervix with subinvolution. Has internal hemorrhoids, from which she has occasional severe hemorrhages. Is somewhat anæmic; has had two or three attacks of œdema of face. These take place without any warning or any prodromata, and continue from twelve to twenty-four hours, disappearing gradually. The swelling is limited to the eyelids and upper portion of the face. The attack which came under my observation involved both lids and face, almost closing the eyes, and giving the countenance a markedly distorted appearance. The tissues evidently contained serum and showed pitting on pressure. There was no superficial redness or pain. No swelling or œdema in extremities or elsewhere, nor had there ever been. Nothing whatever could be found to account for this condition. Heart, liver, and kidneys were normal. Examination of urine showed the following results: sp. gr., 1020; acid; no albumen or sugar, but phosphates; no casts.

The patient was seen again within twenty-four hours, at which time the swelling had almost entirely disappeared. There had been no constitutional symptoms accompanying either this attack or the former ones.—*Gaillard's Med. Jour.*, April, 1888.

[Under Quincke's name *angio-neurotic œdema* Osler reports[2] an hereditary form of this disease, with the following characteristics:

1. The occurrence of local swellings in various parts of the body, face, hands, arms, legs, genitals, buttocks, and throat. In one instance, possibly in two, death resulted from a sudden œdema glottidis.

2. Associated with the œdema there is almost invariably gastro-intestinal disturbance, colic, nausea, vomiting, and sometimes diarrhœa.

3. A strongly marked hereditary disposition, the disease having affected members of the family in five generations.]

Debove on Hydatid Poisoning.—The author calls attention to accidents which sometimes follow puncture of hydatid cysts of the lung and liver, by demonstrating experimentally the toxic action of the cystic liquid by means of hypodermic injections. In this way he can produce urticaria upon healthy subjects; but, besides the urticaria, there are phenomena of collapse which are very alarming. He has noticed attacks of dyspnœa of extreme intensity, with mucous expectoration, cough, and sweats, which generally rapidly disappear.

Laboulbène thinks that these accidents are due to the presence of ptomaines and leucomaines.—*Le Cour. Méd.*, March 31, 1888.

[1] See cases reported by Matas and Hughes, MEDICAL ANALECTIC, 1887, pp. 547, 548.

[2] *Am. Jour. Med. Sci.*, April, 1888.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital.

VOL. V., NO. 17. April 26, 1888. WHOLE NO. 65.

CONTENTS.

	PAGE
Leading Article	197
Therapeutics	199
Miscellaneous	203

LEADING ARTICLE.

Acetanilide or Antifebrine.—By the side of antipyrine stands another new antipyretic, acetanilide, whose properties can advantageously be compared with those of its predecessor.

Acetanilide, or antifebrine, has been known as a chemical compound since 1853, when it was produced by Gerhardt by the action of aniline on acetylchloride, or anhydrous acetic acid.

It is a white, scaly powder, odorless, insoluble in cold water, slightly soluble in hot water, but freely in alcohol. It melts at 113° C., and distils unchanged at 272° C. It is neither acid nor alkaline, and resists the majority of reagents. It is a very stable compound, even undergoing distillation without decomposition.

Acetanilide belongs to the group of phenylacetamides or acetanilides, quite distinct from the phenols which contain the majority of the antipyretics.

The introduction of acetanilide to the profession as a therapeutic agent took place in August, 1886. Drs. Cahn and Hepp of Strasburg, in the *Centralblatt für Klin. Med.*, then published their study of the substance. As in the case of antipyrine, it was the antithermic action which first attracted attention.

PHYSIOLOGICAL ACTION. *Nervous System.*—Lépine (*Comptes-rendus de la Soc. de Biologie*, July 1, 1887), Dujardin-Beaumetz, Grunneberg, Charcot, Weill (*Bul. gén de Thér.*, Feb. 28, 1887), agree in the power of acetanilide to diminish the reflex excitability of the spinal cord. Weill observed, after administering to an animal doses of twenty-five to fifty centigrammes per kilogramme of weight of animal, general prostration with stupor; progressive but rapid lowering of the temperature; sensation at first diminished, then lost; the animal sinking into comatose condition, followed by spasmodic convulsions, and dying in from twenty-four to thirty-six hours after ingestion. It acts especially on the respiratory function, which is markedly slowed. According to Heinzelmann (*Münich med. Woch.*, Jan. 17, 1887), deafness and mydriasis have occasionally occurred with therapeutic doses.

Circulatory System.—The effect upon the heart, blood-vessels, and blood is very prompt. The heart at first is slightly quickened, then slowed and strengthened. Prolonged use of the drug is said to produce fatty degeneration of the heart muscle (*Gaillard's Jour.*, February, 1888). Acetanilide first stimulates the vaso-motor constrictor system, leading to increased arterial tension. This effect is soon followed by dilatation of the cutaneous arterioles, and perspiration immediately appears. Acetanilide markedly diminishes the oxyhæmoglobin of the blood, and methæmogobin increases. This produces a state of internal asphyxia from the interference with the respiratory power of the blood. Cyanosis in this way is not infrequently seen from therapeutic doses, but is quickly recovered from. Lépine says that the change of methæmoglobin back again to oxyhæmoglobin takes place rapidly. The methæmoglobinuria is entirely intra-corpuscular, and the drug exercises no destructive power upon the red blood cells (Weill).

Temperature.—Acetanilide has powers which would lead the observer to suspect an antithermic action. It dilates cutaneous blood-vessels and produces free perspiration, and it greatly retards the processes of disassimilation. This latter action presumably depends upon the interference with the respiratory power of the blood, but it is not as yet wholly explained. Evans (*Ther. Gaz.*, June 15, 1887), in an elaborate article illustrated with charts, gives the results of a painstaking study of the antipyretic action of acetanilide. His conclusions are:

"1. That antifebrine effects a marked depression of normal bodily temperature.

"2. During the depressing action of the drug on normal temperature, it seems to cause a slight fall of arterial pressure. This is not constant.

"3. Although it influences so markedly normal bodily heat, it seems to possess little power against the pyrexia produced by the introduction of pepsin into the blood. Under these circumstances the administration of acetanilide causes rise of the hitherto depressed pressure, and also increase of the bodily heat. (This must depend on some organic change produced by the digestive ferment.)

"4. It reduces normal temperature by influencing both heat production and heat dissipation.

"5. Acetanilide in fever reduces high temperature by decreasing heat production."

Alimentary Tract.—Acetanilide has no influence on the digestive system.

Skin.—It is only very rarely that any eruption is produced. Cahn and Hepp have seen the appearance of the miliaria cysts and rubra. As with antipyrine, the action of antifebrine is almost invariably accompanied by profuse perspiration, which often is the first physiological effect. Atropine does not counteract this sweating.

Urine.—The urine is greatly increased in amount, the direct result of the increased arterial tension (*Osler, Ther. Gaz.*, March, 1887). Cahn and Hepp recovered acetanilide in its own form from the urine.

Antiseptic Properties.—Cahn and Hepp think the drug has energetic antiseptic properties. This action is denied by Dujardin-Beaumetz, but affirmed by Lépine. The latter thinks that the antiseptic action is due to the aniline, which, being set free from combination, exerts its antifermentative power. This, however, is hardly in accord with what chemists claim to be the extreme stability of acetanilide.

Tissue Change.—Acetanilide not only retards tissue disintegration, but favors fatty metamorphosis.

THERAPEUTICAL ACTION.—As an *analgesic*, Dujardin-Beaumetz claims that acetanilide should be placed in the same group with antipyrine and phenol (*L'Abeille Méd.*). Démieville (*Rév. Méd. de la Suisse Romande*) reports eighty cases of all varieties of pain, in which he used this drug successfully: the pains of neuralgias, of tabes dorsalis, headache, migraine, pains with or without nerve alteration. As an *hypnotic*, acetanilide has been found satisfactory. Dr. G. Dalton Hays (*N. Y. Med. Rec.*, Dec. 17, 1887) observed an hypnotic action after its administration for headache, and proceeded to use the drug for pure insomnia. The results were good. Dr. Hays advises beginning with doses of five grains, and creeping up; and as the hypnotic action seems to be sometimes delayed, he gives the dose two hours before bedtime. As an *antispasmodic*, the drug has received little favor, though it has been tried to some extent in chorea and epilepsy. In acute alcoholism, Kell (*N. Y. Med. Rec.*, Feb. 18, 1888) has found its results satisfactory. As an *antipyretic*, acetanilide has been proven effective against fevers of nearly all types. The temperature falls in about an hour, and remains lower for about six hours. Only rarely do rigors attend the subsequent rise. The drug is to be given in doses of from four to ten grains. Experience has proved that the hyperpyrexias of phthisis and typhoid fever are most easily affected (Faust). In typhoid fever the results have been very good, and antifebrine has fulfilled well the indications for an antipyretic drug. In phthisis, acetanilide has been highly commended. Cauldwell (*N. Y. Med. Rec.*, April 16, 1887) concludes that it is the best drug to control the chill and fever of phthisis. It has rarely any unpleasant after-effects, though in many cases it produces sweating, and occasionally cyanosis occurs. It does not interfere with digestion, and can always be retained. It increases the urine and quiets the nervous system, producing a feeling of well-being in the patient. As an *antiperiodic*, acetani-

lide has shown no certain power. In *rheumatism* there is much evidence of its good effects as a symptom medicine to be used at the beginning of an attack of the acute articular form (*Jour. Ment. and Nerv. Dis.*, Jan., 1886, and Riese, Eisenhardt, Cahn, and Hepp). In *dysmenorrhœa* and as a *uterine sedative*, acetanilide has been used successfully (Chouppe, *Br. Med. Jour.*, Dec. 17, 1887).

Comparative Action of Antipyrine and Acetanilide.—Acetanilide is effective in about half the dose of antipyrine, and costs one half as much. The two drugs are about equal in their power to reduce temperature; but antifebrine is more certain than antipyrine, less liable to produce profuse sweat, tendency to collapse and to chill as the action passes off (*Gaillard's Journal*, March, 1887).

While antipyrine lowers the temperature in half an hour, its effect lasting two hours, antifebrine takes longer, one hour or more, and its effects last six hours. Antipyrine will be found more diaphoretic; antifebrine more diuretic (Barr, *Ther. Gaz.*, June, 1887). In migraine both drugs are about equally successful. In epilepsy their efficacy is about equally doubtful; while as hypnotics antifebrine is preferable (Hays).

In hay-fever they are of about the same value. As analgesics, antifebrine is inferior to antipyrine. The special advantages of antifebrine over antipyrine (Simpson, *N. Y. Med. Rec.*, Dec. 3, 1887) are its easy administration, tastelessness, small dose, cheapness, its never producing nausea and vomiting, its pleasant effect on the system, and its diuretic effect.

There have been, however, warnings uttered against antifebrine. The *Lancet*, of July 9, 1887, reports antifebrine as an "uncertain and indeed dangerous remedy"; that its action is uncertain, and that it is liable to produce violent sweats, prostration, hemorrhage, or cyanosis. Moreover, while idiosyncrasy varies considerably, disease also exercises a modifying influence, cases of erysipelas requiring larger than ordinary doses.

Germain Sée believes acetanilide valuable but difficult to manage from the profound effect upon the blood (*Comptes-Rendus de l'Acad. des Sciences*, April 18, 1887).

"Antifebrine" is a proprietary name, and is controlled by patents. Bought under this name it costs about thirty cents per ounce. But the name "acetanilide" cannot be controlled in any way; and under this name the substance can be obtained for fifteen cents per ounce. As it is one eighth the price and one half the dose of antipyrine, it is much more economical in use.—ELIZABETH STOW BROWN, M.D.

THERAPEUTICS.

Whitla (W.) on the Treatment of Rectal Pain by Conium.—The author has an ointment prepared in the following manner:

Two ounces of the pharmacopœial succus conii are placed in a small evaporating dish, and permitted to evaporate slowly at a heat under 150° F. till the bulk is reduced to about one and a half or two drachms. This can be done by placing the dish on the top of an ordinary domestic hot-water cistern for twenty-four or forty-eight hours. The syrupy liquid is then carefully triturated with as much lanolin as will make the weight up to one ounce; the result is a perfectly smooth adhesive ointment of a light-brown or dark-fawn color, and stable.

He employed the ointment in several rectal cases in which severe pain and torturing pruritus were prominent features. One was a case of multiple small fissures, accompanied with intolerable itching; another was associated with severe tenesmus and excoriations from the pus flowing from an iliac abscess bursting through the *levator ani* muscle and penetrating the rectal walls; another was complicated by a bleeding villous growth. These, with two cases of hemorrhoids, one of which had an ulcerated surface, were markedly and speedily relieved by the conium ointment after nearly every known remedy had failed.

It should be freely smeared *inside* the sphincter, and, owing to its adhesive quality, can be carried a considerable distance up the rectum by the introduction of the forefinger of the patient.

The ointment appears to paralyze the endings of the motor nerves distributed to the fine muscular layer under the surface of the mucous membrane. The reflex twitchings of this layer keep up the perpetual pain and uneasiness in diseases of the rectum and anus associated with abrasions, ulcerations, or fissures.

At the same time it undoubtedly para-

lyzes the sensory filaments. He has obtained relief from its use in vaginismus and some painful conditions of the male urethra, and finds it a good lubricant for the sound or catheter.

To the ointment prepared according to the above formula there may be added ten or twelve grains of the persulphate of iron, as recommended by Mr. Cripps in fissure. This combination of conium with iron should have a trial before resorting to the knife or cautery. In acute inflammation of hemorrhoidal growths associated with swelling and painful throbbing, some relief may be obtained by the free application of the conium ointment without iron, but it is in those exquisitely painful fissures or conditions where there is a loss of substance in the mucous surface that this remedy will be found to give more relief than any other drug.—*Practitioner*, April, 1888.

Hardcastle (J.) on Jaborandi in Obstetric Practice.—Having for many years noted the fact that parturition does not progress favorably till *diaphoresis* occurs, I have for some months past induced this condition, in the early stage of labor, by giving fl. ext. jaborandi (*green*—the brown has proved worthless in my hands). My plan is, when called to a case, to order a warm brick to be applied to the feet—which are always cold, and then to give one third of a teaspoonful of fl. ext. jaborandi in half a wineglassful of water, and repeat the dose every half hour until perspiration occurs. It is very seldom that more than two doses are required. The first effect of this medicine on the patient is soothing, she becomes more quiet, and bears her pains with resignation. Upon being questioned the patient often states that her pains do not hurt her as they did. On examination, after diaphoresis occurs, the os will be found dilating rapidly; the soft parts to be in a favorable condition; and in a short time the labor will be satisfactorily terminated. Should the patient appear weak from the sweating, I wipe her face and neck with a dry towel, and give her a teaspoonful of whiskey, or half as much of aromatic spirits of ammonia.[1]

Since using the above remedy, I have had no occasion to use ether, chloroform, or the forceps.—*Med. and Surg. Reporter*, April 7, 1888.

[1] [As alcohol does not detract at all from the diaphoretic power of jaborandi, its *simultaneous* administration seems advantageous to the Editor.]

Duret on Iodism.—According to M. Duret, poisoning by iodine shows itself in three distinct forms—the eruptive, the cerebral or delirious, and the syncopal or hypothermic. The eruptive form is the most frequent. It is characterized by a rubeolar eruption appearing on the different parts of the body, and far removed from the point of application. The poisonous and iodized principles are absorbed by the body, and this eruption is probably caused by the eliminative process carried on through the glands of the skin. The second form is characterized by epileptic symptoms, or by fits of sleeplessness accompanied with delirium. The third form is more serious. The absorption of the iodine is followed by a great increase or decrease in the temperature, which sometimes falls as low as 94° F. These symptoms cease as soon as the iodine is no longer given. Thus, if iodine is valuable on account of its antiseptic properties, yet it must be employed with caution, as in some cases it gives rise to lymphangitis with diffuse suppurative cellulitis.—*Brit. Med. Jour.*, April 7, 1888.

Gubb (A. S.) on Therapeutics *v.* Extemporaneous Pharmacy.—I remember a typhoid patient in a hospital to whom, in consequence of urgent diarrhœa, pills of calomel and opium were given. Although some twenty in all were given, no perceptible effect was produced, and the man died. At the post-mortem examination nineteen of the pills were found in his intestines deprived of their covering, but otherwise intact. If the patient had been unfortunate enough to live a little longer, one shudders to think what would have become of him with thirty-eight grains of calomel and nineteen of opium in his inside. One moral of this incident, among others, is that in urgent cases, pills, unless freshly made and soft to the touch, are undesirable additions to the diet of the typhoid patient.—*Lancet*, March 31, 1888.

Ceccherelli (A.) on Tannin in the Treatment of Tubercular Disease.—From experiments which the author had made on animals, and from clinical experience, he believed it to be a powerful antiseptic, with a specific power of destroying the tubercular virus. He found that the addition of tannin prevented the putrefaction of animal tissues and fluids, and that decomposition was very considerably

delayed in the bodies of animals which, while alive, had undergone a course of treatment with tannin. He had also found that whilst he could produce tuberculosis in certain animals by the injection of phthisical sputa, or of tubercle bacilli, the injections produced no bad effect when tannin was injected simultaneously, or was given internally every day for some time. He had treated twenty patients suffering from tubercular diseases with tannin, both externally and internally, with very satisfactory results. He therefore looks upon tannin as an excellent remedy in tubercular affections of the bones and joints; under its influence ulcers heal kindly, any tubercular formations that may already exist are destroyed, and generalization of the disease is prevented. Dr. Ceccherelli considers that tannin is much superior to iodoform in the treatment of tubercular disease, besides having the further advantage of being perfectly harmless.—*Brit. Med. Jour.*, April 7, 1888.

Mallins (H.) on Kremianski's Aniline Method[1]—a Plea for Common Sense in Therapeutics.—The aniline, we are informed, was used in the proportion of "a drachm to an ounce of eucalyptus oil." Now, when it is borne in mind that eucalyptus oil is a most powerful antiseptic—according to Bucholz, three times stronger than carbolic acid,—and that the amount of this powerful agent exceeded that of the aniline sevenfold, how can it be reasonably inferred that the improvements in symptoms was due to the latter drug? We might with as much reason conclude that, because a man to whom one ounce of gin is given in combination with seven ounces of brandy becomes drunk, the gin is the active intoxicating principle. For the sake of our reputation as scientists, it would be well to allow the light of common sense to shine a little more on our therapeutical experiments.—*Lancet*, April 7, 1888.

Hillaby (A.) on the Treatment of Tonsillitis by the Salicylate of Sodium.—The knowledge that tonsillitis bears some not distant relationship to acute rheumatism, led me to try the salicylate in every case that has come under my care for the last two years. As far as I have had the opportunity of examining the action of the drug in those cases, it has come up to my best expectations: the fever, which is not inconsiderable in many cases (103° F.), is speedily reduced, the action of the skin promoted, the resolution of the inflammation in the throat hastened, and the formation of tonsillar abscess averted. My plan of treatment is as follows:—Open the bowels freely with a good dose of mistura sennæ co., put the patient on milk diet, and administer the following draught:

℞ Sodii salicylatis . . . . grs. x.-xv.
Tincture aurantii corticis . . ♏ x.
Aquam ad . . . . . ʒ i.
Fiat haustus, quartis horis sumendus. M.

When the inflammation in the throat begins to subside, reduce the dose of salicylate and continue to give it in smaller does for a few days after all throat symtoms have disappeared. — *Practitioner*, April, 1888.

Weaver (J.) on Quinine as an Hypnotic.—Sleeplessness seems to be on the increase, and I therefore crave your permission to call the attention of the profession to quinine as a remedy of remarkable value in all cases of insomnia arising from debility, or nervous irritability. The bromides are very useful in their way, but, according to my experience, soon lose their effect, requiring much larger doses, which disorder the stomach, so that the patient soon finds his remedy almost worse than his complaint. I have for some time past given quinine in such cases; a dose at bedtime, as a rule, producing a calm sleep of several hours' duration. The patient awakes in the morning ready for food, and the fatigues of a new day.

In quinine we have a remedy, the taking of which is never likely to become habitual like chloral, opium, etc., neither is it a remedy which can ever have a fatal result. Quinine, however, will not act as an hypnotic in cases of sleeplessness arising from a congested condition of the brain or its blood-vessels. In such cases I have found that its administration produces headaches, and intensifies the insomnia. — *Medical Press*, March 28, 1888.

Brown (A. P.) on Antipyrine in Excessive Fœtal Motion, and in Neuralgia of the Womb.—For some time I have been using antipyrine for neuralgia, headache, and sciatica, and in the morphine habit, and recently have had occasion to use it in threatened abortion, where several of the usual medicines had been used without any relieving effect. It acted beauti-

[1] See MEDICAL ANALECTIC, 1888, p. 182.

fully in each case, having a remarkably quieting effect on the uterine pains and neuralgia. I noticed in two cases very remarkable results of the drug on the fœtus, which had been very active in its movements; this activity was quieted to such an extent as to cause the woman some apprehension, and I was wondering if it had caused death to the fœtus, but a few days demonstrated life, and a great relief from the former distress of the woman. Acting on Cohnheim's idea that benzoate of soda prevents the formation of urea in the system, I use the following prescription: Antipyrine et benzoate soda, of each one drachm; aqua menth. viridis, one ounce; elix. aurant., two ounces. Sig.: Tablespoonful pro re nata. This I used to counteract parturient albuminuria. In a case of bilious intermittent fever in a pregnant female I am now using the antipyrine with double benefit and happy results, alternating the antipyrine with large doses of quinine six, four, and two hours before time for exacerbation.—*Texas Cour. Record of Med.*, March, 1888.

Campbell (J. F.) on Ipecac per Rectum in Dysentery.—I generally use the fluid extract of ipecac in the dose of thirty or sixty drops diluted with two or three drachms of water. Repeat the dose every six, twelve, or twenty-four hours, as required to control the tormina, tenesmus, and bloody discharges, of which there is generally very little after the first enema.

Should the ipecac be evacuated soon after its introduction, I use another dose immediately with the addition of tr. opii, and if necessary make the patient retain it by pressing buttocks together. Usually after the lapse of a few hours there is a free evacuation of the contents of the bowels with a copious discharge of bile. But I sometimes find it necessary to use sulphate of magnesia or castor oil to clear out the alimentary canal. Have never seen vomitine occur but in one case, and doubted if the ipecac caused it. No marked prostrating effect in a single case. By using ipecac in this manner such other medication as is needed can be administered per orem. —*Texas Cour.-Record of Med.*, March, 1888.

Randall (H. R.) a Plea for Scientific Medicine.—It is unfortunate for medical practitioners that the nature of their science renders it impossible to found the principles of their practice upon mathematical axioms.

The vulgar indulgence in so-called independent thought has extended to members of the profession itself, and no idea can be found so preposterous but that some medical man can be found to entertain it; nor need he fear to announce his doctrine, knowing he can elude the pursuit of his adversaries, either by seeking refuge in the unexplored regions of medicine, or hiding behind the claims of "respect due conviction," and demanding the privilege of sanctuary.

Hitherto these men have received too much quarter. He who imagines that the effects of sea-air are due to the presence in it of iodine, ozone, or nitric acid, and while utterly ignoring such considerations as barometric and thermometric conditions, and, above all, the particular condition of each patient, sends his first consumptive to the coast because "iodine is good for fever," "ozone for the lungs," or "nitric acid kills bacilli." Such a doctor should receive no mercy at the hands of his professional brethren; his *conviction* is entitled to no respect; his practice is vicious in its tendencies, and terrible in its effects.

The field is swarming with adventurers who seek only the discovery of new material; and here and there, as one sees a fact which, in the light of his fancy, appears to glitter, he seizes upon it with avidity, and preserves it as a precious gem for a short time, when his fickle fancy casts it away, to search for something new. And so they go on, increasing the disarray, and adding to the heap of rubbish that is so rapidly accumulating on the field of medicine; ever seeking, never finding; searching for a panacea, or fountain of perpetual youth, though a moment's reflection would convince them that it could not exist; deluded by mirages, but still unwilling to profit by experience.

True, we have reports of brilliant operations, in the performance of which some were saved—many perished; we have the structural anatomy of microbes and micrococci; our libraries groan under the weight of statistics—we have enough for the present. Let us now attend to arranging this material; discard what is worthless, put in order what is valuable, and reduce to rule. Our palates may be tickled with the endless variety, but our stomachs are worrying for something substantial.

One of the most famous physicians in

New York recently published a long article to prove not only that the keynote to the prophylaxis of phthisis pulmonalis is to keep the air in an aseptic condition, but that the turpentine emanating from evergreen trees will accomplish this; and he desires to impress upon the public the necessity of cultivating evergreens about their homes.

It has not been reported whether any one has seen fit to follow his advice, but it matters little, for, ere this newly-planted tree of life could start a root, the author of the notion would have abandoned it for some other phantom, which he would be chasing with equal assiduity, equal constancy, and equally important results; while some other man of eminence would be impressing the public with the necessity of removing all evergreen trees for the prevention of tuberculosis.

No one knows better than the abovementioned physician that, among all the potent factors for the prevention or production of phthisis, a little turpentine in the air must be very insignificant; that, if it produce any effect, it must benefit some and injure others; that this cure-all, like that of Bergeon and the rest, must come to grief.

There are some things of which we may be practically certain while unable to demonstrate them. We may feel sure that the attraction of gravity is always operating on matter; that continued heat or cold lessens metabolism in living animal tissue; that changes of temperature produce the opposite effect; that molecular changes give rise to poisons which are deleterious if retained in the system; that the excretory organs are designed to remove these poisons; that an acutely inflamed organ needs rest,—these and numerous other laws we *know*, and it is only by basing our therapeutics upon such laws that we can claim to be practising scientifically.

These laws are far-reaching and capable of application in almost any condition that may arise, and we are not justified in staking the welfare of a patient upon the precarious use of some agent not understood, when science furnishes us with expedients of indisputable efficacy.

Some such thought occurred to me as I once stood by the side of a little girl suffering the torments of a headache incident to the first stages of an acute meningitis. Her physician doubtless knew that continued cold lessened activity of inflammation, but he used no ice-bag; he understood the law of gravity, but he would not prop up the little sufferer's head; to commonplace certainties he preferred hair-brained theories, and was relying entirely upon fluid extract of ergot. Though the little girl died, he accepted his fee with complacency, and his manner evinced no signs of compunction for his guilt.

My object in writing this article is not to discuss the therapeutical advantages of any drug or measure, but to protest against unnecessary resort to systems of treatment whose effects are undecided, and to remind the reader that medicine is not all speculation, and that we possess and understand therapeutical powers whose action is certain and definite. It is the duty of the practitioner to endeavor to acquire the skill to recognize the laws upon which their action depends and the conditions to which they are adapted.

Let explorers make discoveries; let experimenters elaborate them; let the philosopher reduce them to law; and then, but not till then, let the practitioner employ them.

Though cases may occur where the indications may not appear clear to the most skilful, and where treatment must be unscientific, yet the enthusiastic surrender of common-sense in the wild pursuit of unpledged theories is certainly unbecoming in one who professes to be a scientific practitioner of the healing art.—*Medical Registor*, March 3, 1888.

MISCELLANEOUS.

Combined Syphilis and Malignant Disease.—All clinicians have probably noticed the marked temporary improvement which often ensues during the administration of antisyphilitic remedies to patients whom later developments prove to be the victims of malignant and not specific disease. So marked is this improvement at times that both diagnosis and prognosis may be changed.

This effect of mixed treatment can be explained in two ways: either it has a slight alterative and absorbent effect on malignant growths, or these growths often have a syphilitic element in them, *i. e.*, are a combination of malignant disease and syphilis.

It is evidently toward the latter theory that the French school lean. Verneuil, in a late surgical clinic,[1] referred to a thesis by Ozenne as being a very clear exposé of this hybridity between cancer and syphilis, and then narrates several cases of his own.

The first was a healthy-looking baker of 39, who presented himself to his family physician with an ulcer, half an inch in diameter, having raised edges. It was very indolent, having been noticed for four weeks. The appearance and history of the sore, together with the statement of the patient that he had had syphilis three years before, led the physician to diagnose it a tertiary ulceration, and to institute mixed treatment.

In a few days the aspect of the sore began to improve, its base cleared up, its edges became less hard, and the swelling left the contiguous mucous membrane. This stage of improvement was very brief, and in a short time, when the patient was brought to Verneuil, he had a typical epitheliomatous ulceration of the palate. The diseased part was entirely removed by the actual cautery and cicatrization took place normally. In four months the growth recurred and was again removed, but the patient succumbed three months after the second operation.

The second case was a man of 66, who in 1840 had syphilis. In 1886 he burnt his tongue while eating, and in a few days a whitish prominence appeared at the site of the burn. An ulcer soon took the place of the tumefaction, and numerous hard nodules, appearing like gummata, developed in the substance of the tongue. Enlarged glands existed in the subhyoid and submaxillary regions. The pathological process was recognized as epithelioma modified by syphilis, and mixed treatment was instituted, with the result of improving the local induration, swelling, and sensitiveness so much that the patient insisted upon being discharged. Six weeks later he sought readmission, and died in eight days of septic poisoning originating from the gangrenous condition of his mouth.

The third case was a woman of 44, whose mother died of a cancer of the left breast. She gave no history of syphilis. A contusion of the right breast was followed by an indurated nodule which gradually increased in size. Other nodules appeared, the nipple became retracted, and a rapidly spreading ulceration set in, which took on characteristics more of a syphilitic than malignant nature.

Antiseptic dressings and mixed treatment caused complete cicatrization of the ulcer, but did not promote absorption of the neighboring enlarged lymphatics. The ultimate result in this case is not recorded.

According to the *Medical Press*, April 4, 1888, Lang has hitherto had the opportunity of observing four such cases. The carcinoma which developed later on, on the syphilitic soil, was each time proved by histological examination. In the first case which he had observed in 1833, there were besides relapses of iritis and other symptoms characteristic of syphilis, also gummatous ulcerations of the face. Under anti-syphilitic treatment all the ulcers disappeared, except one which became transformed into a cancroid of the skin. The second case was that of a man, æt. 46, who had suffered from various syphilitic ulcerations on different parts of his face and the body. After antisyphilitic treatment, one ulcer, viz., that under the tongue, remained behind, and became also transformed into carcinoma. In the third case a syphilitic infiltration of the lower lip relapsed at the end of a year, and assumed a carcinomatous character. The fourth case presents several scars on the trunk and the face, as well as perforation of the palate and loss of substance of the upper lip. She had been admitted into the hospital during the month of January. Most of the ulcerations were at that time covered with a white scab, but the hsitological examination of this substance did not reveal any sign of importance for diagnosis. Since the 19th of February current, a small ulceration, which was very indolent, became visible over the hard palate. The part which was excised from it for histological examination was found by Prof. Weichselbaum to be "epithelioma."

Pye (W.)[2] on Obliterative Arteritis.—At the age of eight, the patient, a man of fifty-eight, had an illness which he called rheumatism, which left him with a weakened leg and arm. A year ago he found he was losing sensation in one of his fingers. A fortnight later his little finger was affected, and it then spread to his hand and up the arm. In September last the

[1] *L'Union Méd.*, Dec. 27, 1887.

[2] *Lancet*, March 31, 1888.

limb was quite white and extremely cold, with loss of power and sensation. It was considered that this might be due to gangrene, and he was admitted into the hospital. The arteries were found firmly plugged from the axillary downwards, and there was increased pulsation in the subclavian. The arm was wrapped in cotton-wool; it recovered, and the man left the hospital. Mr. Pye thought the condition now existing was a plastic arteritis following the pressure of the crutch, and that this had spread downwards, the whole lesion he thought could be explained mechanically.

Bowlby[1] also says "that his opinion is that in some of these cases the impaired nutrition of the limb, the blue and cold fingers, and the sluggish circulation are dependent upon pressure on the brachial plexus, or perhaps, as in Mr. Walsham's case, on neuritis. In other cases I believe that the interference with the flow of blood caused by the pressure of an exostosis on the subclavian artery causes such a slowing of the blood stream in the smaller vessels that clotting ensues and extends. That this suggestion is not one which is unsupported by fact must be familiar to all who have examined the vessels of a limb some time after ligature of the main artery, for in many such cases clots will be discovered in vessels otherwise healthy. Finally, it is very probable that these causes are occasionally combined. This view, moreover, is not original, for it may be found clearly stated by Mr. Hilton, and for that reason is one which cannot be lightly set aside. I would therefore suggest that the term 'arteritis obliterans' should not be applied to the cases in question until it is clearly proved by pathological investigation that such a disease exists independently of the complications I have mentioned."

Handford on a Mediastinal Tumor Involving the Heart.—The tumor was taken from a man aged forty-five, who had complained of cough for six months and a half. His chief trouble was dysphagia, which eventuated in complete inability to take food by the mouth. He died from slow hæmoptysis. A mediastinal carcinoma was found after death, which involved the lower lobe of the left lung. The left auricle was also implicated, and communicated by a small opening, which was probably the source of the hemorrhage, with the pericardial sac, which contained blood-clot, and also an irregular sloughy cavity between the roots of the lungs. With this cavity the trachea and bronchi, the walls of which were extensively destroyed, freely communicated. The œsophagus was not involved in the growth, and was not strictured, but communicated with the same cavity by three openings, one of which was more than an inch long. There were numerous secondary growths in the liver, which, on microscopic examination, presented typical alveolar stroma of scirrhus. In a very similar case mentioned by Dr. Impacciati (*Lo Sperimentale*, January, 1888), the left auricle was involved, but not perforated. The œsophagus presented two small perforations, and death occurred from inanition from difficulty of swallowing. A third case was described, where death had been due to pulmonary hemorrhage. There was a carcinoma of the root of the lung, spreading along the bronchi and blood-vessels into the lung, and secondary growths in the humerus, muscles, and kidneys.—*Lancet*, April 7, 1888.

Lloyd (J.) on Cancer of the Head of the Pancreas.—The growth had compressed the pancreatic and common bile ducts. The pancreatic duct was dilated to diameter of half an inch, and the gland was full of cysts varying in size from a pea to a pigeon's egg. The common bile duct and the hepatic ducts on section would admit an index finger. The gall-bladder was enormously distended. The patient was nearly 80 years of age, and had suffered during six months from belly pain and emaciation without jaundice. Cholecystotomy had been performed for the relief of painful distension of gall-bladder.—*Birmingham Med. Rev.*, April, 1888.

Yelf (R.) on a Case of Intussusception in a Woman æt 56, with Passage of the Portion of Bowel, 29 Inches Long, on the Fifteenth Day.—Patient went to bed one night quite well, but awoke at 5 A.M. with pain in the abdomen, shivering, and sickness. The doctor who was called in found her collapsed, pulse quick, temperature a little raised, no palpable tumor. The pain lasted only one day; the sickness, however, continued. The bowels began to act in a few days, the motions being liquid, and consisting chiefly of blood and mucus. On the fifteenth day she passed a piece of intestine 29 inches long, and partially digested. Patient continued

in a typhoid state, being sick once or twice, and suffering from constant diarrhœa. She improved greatly after some weeks, and went to her own home, where she died six months afterwards from improper nourishment and exhaustion. At the post-mortem the intestions were found adherent in many places, and very easily ruptured by manipulation. A stricture was found at one spot, evidently the point of junction of the intestine after separation of the intussusception.—*Edinburgh Med. Jour.*, April, 1888.

Brown-Séquard on the Rapid Return of Sensibility and Voluntary Movement after Suture of Nerves.—In a case of suture of the median nerve observed by M. Tillaux, the peripheral end was visibly atrophied prior to the operation, yet in the course of a few days sensation and voluntary motion returned. It is evident that complete regeneration of the distal section of the nerve could not have taken place in so short a time. In another case, suture of the median nerve four years after division was followed in *three hours* by the return of sensation. A month later his arm was jammed, and soon after a certain degree of anæsthesia and paralysis manifested themselves. Two months after the accident the old cicatrix was opened up, but as it did not appear to have been injured, the wound was closed and drained. Two hours after the operation sensation again began to return. This case also tends to prove that return of sensation is not due to a reparative process. Dr. Séquard argued that although theoretically section of the median nerve ought not to cause complete paralysis and anæsthesia of the forearm and hand, yet these were always observed, a fact which he explained by an inhibitory action on the part of the central end of the divided nerve, superadded to the loss of the trunk fibres. The mechanism of this return of function is obscure; return of sensation, etc., is not constant even when the cut ends have united by first intention.—*Med. Press*, March 28, 1888.

Hopkins (T. S.) on Aspiration of the Bladder through the Urethra.—The patient was badly strictured. The catheter passed the first stricture with little trouble, but when it reached the next, in the membranous portion it stopped. The point entered the stricture far enough to be firmly grasped by it. It occurred to me that if I would attach to the end of the catheter a Davidson's syringe, and with my left hand grasp the penis, and closely and firmly close the urethra around the catheter, so as to make the bladder a closed sac, I might aspirate it. I tried it and was successful, not only once, but every time it was tried.

With a catheter perforated in its point, and a Davidson's syringe, I believe that almost any case of retention of urine can be thus relieved.—*Atlanta M. and S. Jour.*, April, 1888.

Hofmokl (A.) on a Complicated Operation on the Intestines.—The surgeon narrates the case of a girl, æt. 29, on whom he had, owing to the presence of carcinoma, removed a part of the colon ascendens, the cæcum, and the appendix vermiformis. He immediately united the intestine and closed the abdominal wound. The operation which had recently been recommended for such cases consisted in the resection of the intestine, the application of an artificial anus, and the union of the resected parts of the intestine at a later period. As to the patient under consideration, she noticed, two years ago, the presence of a tumor in the right abdominal region. As the tumor was movable, the attending physician diagnosed a movable kidney, and directed the patient to wear a pelote. The pains from which the patient suffered, however, gradually increased, so that the pelote had to be removed. Disturbances of digestion and severe diarrhœa also supervened. On admission the patient was somewhat emaciated; her abdomen was non-distended, and a movable tumor of the size of a fist could be felt in the hypochondriac region. The irrigation of water into the colon could not facilitate the diagnosis, as a stricture of the intestine was absent, the injected water finding its way through the diseased part. As the patient suffered from fever, and this tumor showed a high degree of mobility, it was suggested that they had either to do with a movable kidney or with carcinoma of the colon. The patient was operated upon on the 14th of Nov., 1887. The tumor was found to be covered with a part of the epiploön, and the mesocolon was rather long. A part of the colon, as well as the cæcum and the processus vermiformis, were removed, and were afterwards closed with a threefold series of sutures. The temperature rose to 100° during the first days, and the patient passed at that time fœtid and liquid stools. Injection of a solution of the salicylate of sodium removed the fœtor at

once. The patient speedily recovered, and was completely cured. The mesenteric glands were not enlarged, and the disease present was adeno-sarcoma.—*Medical Press*, March 28, 1888.

M'Keough (G. T.) on Poisoning by Corrosive Sublimate from a Vaginal Tampon.—Mrs. J. W., aged 36; multipara, pregnant about three months, although she was not aware of the fact, as she had been losing blood periodically since the weaning of her last baby. I was sent for on the present occasion on account of profuse flooding, and before I could reach her, some miles in the country, she had lost a large quantity of blood and presented on my arrival a decidedly anæmic appearance. About six months previously I had made an examination of her pelvic organs and found a large bilateral laceration of the cervix uteri, a profuse cervical catarrh, and a hyperplastic condition of the entire uterus. No treatment was however inaugurated except the use of hot water vaginal injections. I now could merely feel through the torn, cicatrized, and but slightly dilated os, the contents of the uterus. I immediately proceeded to prepare a tampon, but unfortunately finding my boro-glycerine bottle empty, the medicinal agent I usually employ for disinfecting my tampons, I put about 5 grains of bichloride of mercury and a pinch of table salt into a bowl containing about a pint and a half of warm water, moistened half a dozen good-sized pads of cotton batting with the mixture, and with the aid of a Sims speculum placed them in the vagina firmly around the uterus. I left her, expecting to return the following day. A few hours later, however, I was again summoned, and found my patient suffering severely from pelvic pain, not intermitting, nausea, and a general feeling of illness. Her temperature was normal, pulse quick, and physiognomy distressed and anxious. Suspecting the probability of poisoning by the mercuric salt, I immediately removed the tampon, and syringed the vagina thoroughly with hot water and afterwards with a mixture of the white of eggs and milk. During the three following days she suffered from severe pains in the abdomen, frequent dysenteric stools, nausea, vomiting, stomatitis, and general depression. She was given brandy and water, milk and raw oysters freely. A mixture of pot., chlor., suppository of opium and belladonna, with frequent vaginal injections of albuminous mixtures, constituted the treatment. The uterine contents becoming offensive with rise of temperature, denoting commencing septicæmia, they were removed upon the third day with finger and curette, when the temperature became normal and remained so. After a few days of great anxiety to me, she quite recovered.—*Canada Lancet*, April 1, 1888.

[That the enteritis produced by sublimate is located chiefly in the lower bowel has been recognized for some time. Virchow (*Med. Press*, Feb. 22, *and Pract.*, April, 1888) was perhaps the first to fully demonstrate this by pathological specimens. In one of the specimens exhibited the inflammation extended over the whole of the colon and a great part of the small intestine, the intensity of the disease being such that even the severest case of dysentery was not comparable with it. The case was that of a married woman of twenty-five, who had previously been in the best of health. At the end of December, when she was three months pregnant, a rigor came on, followed by fever, which in two days eventuated in abortion. The vagina was washed out with a 1 to 500 solution of sublimate, after which the cavity of the uterus was irrigated with a litre of solution of the same strength. The fluid escaped freely. Owing to a retained clot the uterus was a second time washed out with a solution of 1 in 5,000, and some more was used for the vagina. The fluid was again completely expelled. Shortly after, the patient had a rigor, for which stimulants were given. Two hours later a copious evacuation took place, uncontrollable diarrhœa, and vomiting; remedies were unavailing, and the following day anuria and collapse came on, and the patient died. Probably the whole quantity of sublimate employed amounted to less than thirty-one grains. The post-mortem examination revealed very advanced parenchymatous nephritis.]

Vance (A. M.) on Potassium Iodide in Non-Specific Surgical Ailments.—In subacute or chronic joint diseases, the result of either synovitis or rheumatism, I have obtained very marked improvement from the use of the potash, also in hydroceles, pleuritic effusions, and in neuralgia, the result of rheumatism.

I commence with ten or twenty drops of the saturated solution and increase a drop

every dose until marked constitutional effects are manifest, then return to the original dose and increase gradually again, always directing that it be taken largely diluted with water, milk, or vichy, and only after eating. I can recall a number of instances where I know much good has been done by this method after the patients had received no benefit from the ordinary doses of ten to thirty grains three times daily.

CASE 1. Child aged two and a half years, Potts' disease, high dorsal region, developed complete paraplegia during a severe attack of whooping-cough. This child was put upon iodide of potassium, commencing with gtt. v *ter die*, gradually increasing to gtt lxv *ter die*, when the drug was discontinued because of an acne which appeared in the external auditory canals. The eruption soon disappeared, when the medicine was again commenced, and increased to gtt. xcv *ter die*, which was continued for several weeks with every evidence of improvement from the time gtt. xx was reached. This child has recovered the power of locomotion almost completely, and in a very much shorter time than is usual.

CARE 2. A theological student, thirty-two years of age, giving history of general rheumatism three years previous to my seeing him, came to me for relief of constant pain and tenderness in both heels. Had not been able to walk, except on his toes, for nine months. Upon examination I could discover no symptoms, except that when deep pressure was made in the centre of the heel acute pain was evinced. My diagnosis was a neuritis of rheumatic origin. This case was completely cured by large doses of potassium iodide, commencing at gr. x *ter die*, and gradually increasing to gr. c *ter die*.

CASE 3. Miss R., aged twenty-two, saleswoman, had been suffering at intervals for more than a year with great pain about the left little toe, she believed that the trouble was of rheumatic origin. Potassium iodide was given freely, with complete relief. One year passed, and in the damp weather of last spring she was again disabled completely by the old pain returning, extending this time along the nerve trunks to the hip, and making her very lame. A diagnosis of sciatica from rheumatism was made, and large doses of iodide given, with a cure soon resulting. The patient was burned once with Pacquelin's cautery.

CASE 4. Mrs. R., aged thirty. When I was called she had been suffering with inflammation of the right knee for six weeks. The physician in charge had treated her for acute rheumatism of the joint with the usual remedies, and had been giving gr. xv pot. iodide *ter die* for two weeks without benefit. The joint was very stiff at an angle of ninety degrees. The limb was straightened with weight and pulleys, and a posterior splint of leather applied, the iodide being increased one drop per dose, until she took lxxv gr. *ter die*. Within ten days she was able to walk without pain, and recovered with perfect motion in joint. —*Am. Pract. and News*, March 31, 1888.

Thomson (P. J.) on Acute Conjunctivitis Due to Aniline.—The whole of the visible portion of the left eye, both cornea and sclerotic, was of an intense violet-blue color. There was a good deal of photophobia and a constant flow of tears, and both eyelids were intensely congested. The patient complained of great pain in the eye. In answer to my inquiries as to the way in which the accident happened, Miss H—— informed me that she was writing with an ordinary aniline pencil, and, being exceedingly myopic, she was holding her head quite close to the paper. She supposed she must have pressed rather hard on the pencil, the tip of which flew off and struck her in the left eye, and lodged, she believed, under one of the lids. If it did lodge it must have been very rapidly dissolved, for I could find no trace of it. By the following morning most of the violet coloration had disappeared, but the eye was more congested and extremely intolerable of light. On May 7th there was no trace left of the dye, but the conjunctivæ were violently inflamed, and both lids were in a state of chemosis. My notes for the following days run thus :—May 8th : Less chemosis of both eyelids ; eye still very congested ; much less pain. 9th : Left eye very red ; pain at intervals in the globe this morning. 10th : Improving ; slight dulness of cornea ; small abrasion just above the pupil ; less injection of vessels. Miss H—— left the same day for London, where she was seen by one of our leading oculists. She only recovered, so I heard, in about a fortnight, or close upon three weeks after the accident.—*Lancet*, April 14, 1888.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital.

VOL. V., NO. 18. May 3, 1888. WHOLE NO. 66.

CONTENTS.

	PAGE
Occasional Report on Diseases of the Ear and Eye	209
Therapeutics	211
Miscellaneous	215

OCCASIONAL REPORT ON DISEASES OF THE EAR AND EYE.

BY A. T. MUZZY, M.D.

Aysaguer (P.) on Lactic Acid in Suppurations of the Ear.—Although great progress has been made of late years in the treatment of suppurations of the ear, yet it must be admitted that cases constantly are met which prove refractory even to the improved methods. Lactic acid now seems to be an additional recourse by which to diminish the number of these refractory cases. The experiments of Mozetig-Moorhof demonstrate the efficiency of lactic acid in cases of fungoid caries, and also show that it acts only on altered and false tissues, and but little or none at all on normal tissue; then taking into account the results obtained by Krause in ulcerations of the larynx, I commenced two years ago to use lactic acid in certain cases of suppuration of the ear. Lactic acid acts especially in a group of affections in which the process of hypertrophy exists. It is upon fungi of the drum, on granular forms of otitis, or myringitis, on polypoid vegetations, on caries and necrosis accompanied by fungi and brawny tumor, or portions of polypi remaining after ablation of these little tumors, that lactic acid has a remarkable action. In acute or chronic suppurative inflammations of the tympanum it is altogether worthless. The method of using the acid is quite simple. At first a solution of one in six parts was used, rapidly increased to the pure acid; then later, solutions were used of equal parts, to begin treatment of cases, increasing to the pure. Often now I commence with the pure acid. I have not had a case where treatment had to be suspended because of the strength of the solution. Pain is in most cases almost nothing. Tissues touched by the acid become grayish as if mortified. It is not necessary to syringe the ear after instilling the acid.—*Rev. Mens. Laryng. d'Otolg. et Rhin.*, Paris, Jan., 1888.

Jackson (V.) on Epithelioma of the Ear—Removal of the Upper Half of the Ear—Recovery.—A furnace-man, seventy-eight years of age, came to the Wolverhampton and Staffordshire General Hospital Oct. 20, 1887, on account of epithelial cancer involving the right ear. Patient had always been a stoker, and, with the exception of the present trouble, had enjoyed good health. About four months before had noticed a wart on the lower edge of the upper portion of the helix. This soon ulcerated, spreading at the same time till it reached the size of a shilling. At times he had experienced considerable pain, and occasionally it bled. The appearance is characteristic of its epithelial nature, and careful examination failed to detect swelling of the neighboring glands. Oct. 27th, under a 5 % solution of cocaine painted over that portion of the ear, the upper third of the pinna was transversely excised. The edges of the skin were laced together with catgut, wound dusted with iodoform; the whole side of the head enveloped in blue wool and protected by gauze and flannel bandage. This affection is infrequent. The classical points in the history of this case are that the patient was a male of advanced life, that the outer an-

terior surface of the ear was affected, and that there was no previous condition of eczema or other irritated state of the skin. His occupation of furnace-man being an exposed one is doubtless the initial and promoting cause. The operation was borne well. Nov. 4th he was discharged well. His family physician reports him in good health, and no appearance of return a few days since.—*London Lancet*, March 31, 1888.

Auditory Allochiria.—This is a symptom first described in 1882 by Obermeister, viz., the perception of a sensation on the opposite side of the body to that on which the excitation was made. Most frequent instances occur in spinal diseases. It has been noticed in one case of hyperplastic otitis and auditory hyperæsthesia of the left side with no signs of paralysis, hysteria, or tabes. It consisted in the fact that the patient heard on the left side a piping sound in the right carotid artery under the influence of the least effort or slightest emotion. —*London Lancet*, Feb. 11, 1888.

Williams (A. D.) on Abscess in the Drum Thought to be Toothache.—A young man consulted a dentist for a supposed toothache in the right side of the upper jaw. Nothing wrong could be discovered with any of the teeth. But the right ear presented a bulging outwards of the upper back portion of the drum to the extent of a pea. This, when punctured, exuded pus; more being expelled by politzerization. This very promptly stopped the toothache. Here the usual order was reversed of sympathetic irritation between the ear and the alveolar process.—*St. Louis Med. and Surg. Jr.*, March, 1888.

Boucheron. Melancholia.—Otopiesic Affections of the Ear.—In a translation from *Gazette des Hôpitaux*, No. 138, in the *Southwestern Med. Gaz.*, January, 1888, Boucheron refers to other writers who have noticed that affections of the ear cause impressions on the nerve centres—vertigo, convulsions, epilepsy, mental depressions, melancholia even. He studies the connection of the cause and effect more between obstruction of the Eustachian tubes than the grosser lesions usually mentioned—otorrhœa, suppuration or necrosis of the mastoid, ceruminous plug, foreign body. In the obstruction of the Eustachian canals the difference in atmospheric pressure within and without the tympanic cavity causes excitation of the labyrinth and of the nerve by compression, *i. e.*, otopiesis. Then, according to the predispositions of the individual, various radiating effects are produced. Thus transmitted to the medulla oblongata and spinal cord, epilepsy, pseudo-meningitis, or convulsions without special character occur. Affecting the cerebellum, disturbances in equilibration, falling, rotatory movements, and vertigo are seen. On reaching the brain and cerebral cortices, the irritation gives rise to mental depression, varying from the lighter forms of dulness of memory, through blunted affections, conditions of suspicion, and to ideas of persecution. A case is mentioned where troubles of equilibrations, with recent acute melancholia and loss of hearing from Eustachian obstruction, were promptly relieved by insufflation with air. This differs from the usual supposition that there is a meningo-encephalic or spinal affection with lesions radiating along the nerve to the ear.

Ménière (E.) on Complete Bilateral and Unilateral Deafness following Mumps.—The writer describes four fresh cases, and refers to five others, two of which were under his own care. All were seen at a considerable period after recovery from the mumps. Other writers consider these cases rare, but no doubt many of them pass detection, as general practitioners are not versed in otology. No case of autopsy of any case of deafness after mumps is known. The pathology is hence uncertain. "While admitting the possibility of labyrinthine trouble, I believe that in the majority of cases there is hyperæmia of the cerebral meninges creating lesions of the auditory nerve at its origin or along its course." The history of the four cases given relate a period of moderate to high fever for two or more days; and with the subsidence of this, deafness appears more or less suddenly but complete, which is not relieved by any fluctuations whatever. Though the proportion of this complication is doubtless small to the whole number of persons attacked by mumps, it would be of value to know what the exact relation is.—*Rev. Mens. Laryng. d'Otolg. et de Rhin.*, Paris, Jan., 1888.

Pancoast (G. R.) on the Use of Mydriatics.—The use of mydriatics in refractive examinations entails much annoyance on patients in active life. Especially among the working class, the loss of four days to a week from work is quite serious. A suggestion to use eserine was

followed. The 30th of January I put myself under the influence of atropine: at 4, on February 2d, after examination for astigmatism, I put a $\frac{1}{10}$ of a grain of eserine sulphate in each eye, also a $\frac{1}{4}$ grain morphine sulphate. At five o'clock I was able to read and write. At seven, two drops more used to continue use. Next morning, February 3d, two more drops administered, completely regaining control of ciliary muscle. The solution causes a slight blepharospasm, obviated by addition of a little cocaine.—*Med. Reg.*, Phila., Feb. 18, 1888.

Hansell (H. F.) on Ectopia Lentis.—A colored boy, aged ten, presented several deformities; and along with deviation of the spine, anterior curvature of each tibia, and a misshapen head, rejoices in a congenital displacement of each lens. Their lower margins are distinctly visible about the centre of the pupils. The right lens is dislocated upward. The left upward and outward. As seen through the lens the eyes are highly myopic, and hypermetropic, as seen under the lens. The temporal side of each disk presents a patch of atrophic choroid. There is no coloboma of the iris or choroid. With the right eye the boy can read large print only, when two and a half inches from the eye. The left eye is useless.—*Cincinnat. Lancet-Clin.*, March 31, 1888.

Caudron (V.) on Electric Insolation.—A man, while experimenting on soldering metals with electricity, removed his guard of dark glass for a moment to assure himself that the electric flame traversed the metals. No immediate ill effects were noticed for about 10 hours. He then noticed a burning heat in the lids and the skin of the face about the eyes; lachrymation commenced; there was sharp pain, and photophobia, such as to close the eyes. The skin of the face thickened, and the eyelids were swollen and of a bright red color. The spasms of the eyelids were intensified by any effort to open them. Instillation of a 2 % solution of cocaine soon quieted the spasm, when the bulbar conjunctiva was found free from swelling or redness, and the cornea intact, the pupil contracted. Hot water bathing for the eyes was ordered. In the course of a few hours lachrymation was much less, the pain had wholly disappeared, and the swelling of the lids had also lessened. At the end of two days the only souvenir of the mishap was a green discoloration of the skin, such as is seen among glass-makers. This remained over a week. Similar cases are becoming every day more numerous, and have been described by Dr. Defontaine and M. Ferrier.—*Rev. Gen. d'Ophthal.*, Paris, Feb. 29, 1888.

THERAPEUTICS.

Jeffries (J. A.) on the Sterilization of Milk and Foods for Infants.—It is a curious fact that while all older people are chiefly fed on sterilized food—that is, cooked food,—infants are fed on food peculiarly adapted, by its composition and fluid state, to offer a home to bacteria.

Investigation of the milk supply soon showed that this, though "fresh each day," was, as a rule, found to be decidedly acid, often curdling if heated, by the time it was fed to the infant. This the infant, unable to talk and knowing nothing better, was obliged to take or go empty. So, remembering the custom of housewives to scald the milk, directions were given that all milk used for the infants should at once, on receipt, be steamed in a skillet set into the top of the tea-kettle. After this it was kept covered and on ice if possible. The bottles were rarely clean, but were, as a rule, emptied after each feeding. The result was that, instead of staying at the point of death, the little patients began to pick up and were soon well, the stools first becoming light, then yellow. I have since undertaken to devise some way by which milk can be practically sterilized—to lay down a rule applicable in any house, by any ordinary nurse.

The ordinary milk supply of a large city is a day or more old, has a slightly acid reaction, and contains many growing bacteria. If kept for a day it is decidedly acid in reaction, has a sour taste, is apt to curdle if heated, and contains a very large number of bacteria, the cause of the changes. Fresh milk sterilized, or collected sterile and protected from organisms, undergoes no changes, even after the lapse of indefinite periods, except the separation of the fats. If bacteria are present, a great variety of changes may occur according to the species—for instance, the milk sugar may be turned to acids, the fats broken up, or tyrotoxicon formed. As milk affords such a fine medium for growth,

all efforts to rid it of bacteria must be governed by the use of poisons—germicides—or some physical condition inimical to their life. The first method is not admissible in foods, while the other offers little chance of success except by heat. Cold simply retards their growth, does not kill. As boiling produces marked changes, this also is undesirable, so our means are narrowed down to the ordinary one of steaming. Fortunately this produces but slight changes in the milk compared to boiling, and, as I have found, is efficient.

As a result of forty-nine experiments the author lays down the following rules:

Stopper the flasks with cotton-wool and heat them in the oven for thirty minutes, at a mild baking heat, or until the wool becomes brown. Pour the requisite quantity of food into the flask and then place in the heated steamer for fifteen minutes.

The first rule is an advantage and easily done, but not of great importance. The second is both easily done and goes to the root of the subject. Any cooking steamer with a perforated false bottom and a snug cover will do, or the lower part of a Chamberlin's steamer. The heat must be sufficient to keep the water in active ebullition.

The vessel should be of good size, at least eight inches across the bottom—better a foot, and sixteen inches high. Inside, four inches from the bottom, there should be a projecting rim, on which should rest a metal plate perforated with numerous holes a half inch in diameter. The cover should be tight so as to hold in the steam and prevent the ingress of air. For use, two or three inches of water should be placed in the bottom and brought to a fast boil, when the flask should be set as near the centre of the diaphragm as possible, the cover replaced, and the whole allowed to steam for fifteen minutes. The flasks should then be taken out and stood in the cold, of course to be brought up to the body temperature before feeding.

The chief source of failure lies in an insufficient supply of steam to keep the upper chamber full; the heat must be ample, that of a range or Bunsen burner. Where the additional expense can be borne, it is better to cover the outside of the steamer with a thick jacket of felt, extending to within two inches of the bottom.

The milk should be steamed when *first* received, preferably in the flasks from which it is fed to the infants. This requires a few more bottles, as many as the infant is fed times during the day, but will well repay for the trouble. If the milk is allowed to stand before steaming, the advantages of the method are done away with in great part. The milk may be sweet, but has already been acted upon by bacteria, and is certainly unhealthy. In case a sufficient number of flasks cannot be afforded, the milk should be steamed in a few larger ones, kept stopped with cotton-wool, and drawn from as needed. This is the best method to employ in hospitals, where the contents of a large flask will be used up in a short time.

The secret of the success of this method lies in the well-known fact that the vegetative forms of bacteria succumb to a moist temperature of 100° C. (212° F.); that spores develop slowly; and lastly, but not least, that in milk, being an excellent medium for growth, spores rarely form, spore-formation among bacteria, like seeding among higher plants, being a phenomenon of impaired growth. The dearth of spores of ordinary milk can be demonstrated by the use of the microscope and patience.

Fifteen minutes' steaming is advised rather than five or ten, as some of the earlier experiments reported show the longer period to be more effective. As the entire mass of fluid must be heated up to the boiling-point, this time is requisite. It is not without significance that the fifteen minutes' steaming is that employed by bacteriologists to sterilize their media.—*Am. Jour. Med. Sci.*, May, 1888.

Three Cases of Hyperpyrexia in Acute Rheumatism Treated by Cold.—Dr. William M. Ord related the first case. The patient was a man aged thirty-two, a heavy beer-drinker, who had contracted, three weeks before admission to St. Thomas' Hospital, a sharp attack of acute rheumatism, referred to exposure to cold. On admission, he was found to have acute inflammation of many joints, marked signs of pericarditis, and slighter signs of endocarditis, with some pleurisy. His temperature was 102.4°, the respirations were quickened, the urine contained one sixth of albumen and very little chloride. He was slightly delirious. Two days later the delirium had increased to such a degree that it was necessary to remove him from the large ward to a single-bedded ward. He was very violent, had hallucinations and delusions, and was with difficulty

kept in bed. The delirium strongly suggested the existence of hyperpyrexia, but the temperature was only 101.4°. After this the temperature rose steadily, till at 4 A.M., on the morning of the fourth day from admission it reached 108.4°, while the patient had fallen into a state of restless unconsciousness, with tremors. The ice-pack was now applied, and was maintained for four hours, at the end of which the temperature was 100°, the patient had recovered consciousness and spoke sensibly, and the pulse had fallen from 160 to 100. During the next few days the temperature, after a first rise to 103.4°, kept between 100° and 101°. The signs of pericarditis disappeared, but those of endocarditis remained. The joint affection had greatly decreased, and the albumen had disappeared from the urine. On the seventh day after admission, temperature again began to rise, and at 2 A.M. on the morning of the eighth day was 105.4°, the patient having passed through delirium into restless unconsciousness. The ice-pack was again applied. By 5 A.M. the temperature was 100°, and the patient had recovered consciousness. After this the patient made a steady recovery, and was discharged six weeks after admission, in good general health, and without sign of lung or heart disease. Dr. Ord urged that notwithstanding the acknowledged value of the various antipyretic drugs in pyrexia, their use in hyperpyrexia was comparatively unsafe, large and frequent doses being required, whereby toxic symptoms were often produced. He admitted that the bath treatment was not of universal applicability, but pointed out that it involved no poisoning, and had a remarkable effect, not only in reducing temperature, but in restoring the nervous system to a natural condition. The rapid disappearance of inflammation in the thoracic viscera and joints was also noteworthy.

Dr. C. J. Arkle reported the following cases: Case 1. A. W. G., aged 27, married, railway clerk, was admitted into University College Hospital September 21, 1887, with an ordinary attack of rheumatism. On admission he was treated with large doses of salicylate of soda. The night after admission he became very delirious, the joint pain disappeared, the skin became hot and burning, and the temperature was up to 110.4°. He was treated with ice-cold bath for forty minutes. The temperature fell to 97°, but ran up four hours later to 107.2°, while he was taking antifebrin. The bath was repeated for twenty-five minutes. The temperature fell again, and showed no further tendency to run up excessively. No visceral lesions followed. The patient was ultimately discharged cured. Case 2. E. C., aged 30, a married woman, had been ailing with joint pain for a week before she had been seen by a medical man. The temperature at mid-day on October 9, 1887, was 102.5°; at 10.30 the same night it was 110.4°. The patient was violent and delirious. No bath being available, she was treated with ice-cold packs. The temperature fell one hour later to 101°, and for the next twenty-four hours averaged 103°. It then fell to normal under salol and salicylate of soda. The patient was discharged well on October 27, 1887.—*Br. Med. Jour.*, March 31, 1888.

Culpeper (W. O.) on Acute Iodine Poisoning.—On Tuesday January 17th about 9 P.M. a colored woman applied 3 ii of some preparation of iodine to both legs of her son, a child of eleven years, for some skin disease, probably eczema. The application was thorough, and the preparation was strong, for it took off all the skin from above the knees to below the ankles on both legs; there was *absolutely* no spot on either leg in any way covered, but the whole was as raw as if scalded in molten metal or boiling syrup.

On Tuesday night and Wednesday the child seems to have suffered very much, but only locally, from the pain. On Wednesday night he was seized with headache, pain in the back over kidney, over stomach and bowels and bladder, and did not appear to have passed water. These symptoms became worse on Thursday, also some diarrhœa and vomiting along with great thirst. Boy says he passed water once, mother says he tried several times but passed none.

On Thursday night and Friday the pains seem to have reached their acme and hiccough came on. The slightest movement induced the vomiting and hiccough, and there was constant desire for water, and ineffectual desire to pass water. Mother and child state that there had been all along more or less spitting. On Friday night the hiccough became worse, and on Saturday morning I found the child vomiting, purging, and hiccoughing, crying continually for water, and bringing it up as soon

as swallowed. He was perfectly in his senses, said he had no pain except in his head and over his bladder. His temperature was 98.8°, his pulse rapid, but the artery was full and struck the finger with a fair impulse. His skin was dry and his tongue furred; tongue and buccal mucous membranes were free from moisture, but not dry to any degree. His pupils were normal. The child told me that all the time he had been sick whenever his head was raised up it spun around and he got giddy, and his mother said he had fainted away several times, so that she had to give him smelling salts. His abdomen was flat, and there were no signs of water in the bladder. I used the catheter three times without getting the slightest amount of water. This operation was not very easy as he was suffering from priapism, and had, in addition, epispadias. There was no salivation at this time, and parotid glands did not appear in any way swollen.

During the day (Saturday) he improved a little, and I examined his alvine discharges. I found them free from any particular fæcal scent, only a little raw. I tested some and found iodine, a tablespoonful mixed with a little nitric acid and tested with starch turning quite blue. The next morning his condition was worse and his alvine discharges had mucus mixed with blood (something like dysentery); there were some dark-colored specks, which, on being touched with acid and treated with starch, gave a deep blue. During this day his pains returned and the dysenteric stools became frequent, the vomiting and hiccough continuing all the time. On Saturday he was slightly out of his mind for a short time, from want of regular sleep, I think. On Sunday night his symptoms became more marked, but his intellect remained clear. He died at 4 A.M. on Monday morning. His mother raised him up to let his bowels move, and soon after he passed away quietly and without pain; his stools becoming almost pure blood, according to his mother.

I could not test his saliva, as there did not seem to be any. All the fluid I saw him bring up from his stomach was water or medicine, the very minute he swallowed it. The act of vomiting did not seem very distressing. I did not test the fluid vomited, and I could obtain no urine.—*Therapeutic Gazette*, April, 1888.

Routh (A.) on Peppermint Water in Pruritus Pudendi.—The preparation of aq. menth. pip. answers well, but is bulky for carrying about, and is incapable of concentration unless rendered alkaline. This is best done by borax, as being in itself soothing and antiseptic. Patients can easily make their own lotion, as required for use, by putting a teaspoonful of borax into a pint bottle of hot water, and adding to it five drops of ol. menth. pip., and shaking well, the parts affected to be freely bathed with a soft sponge.

If no cracks or sores are present, this lotion will remove the itching, but if there be eczema, etc., or rawness from scratching, it is inapplicable, olive oil, with five grains of iodoform to the ounce, being then more useful. The greatest and most permanent relief is afforded in the neurosal form, especially in the reflex pruritus which often accompanies pregnancy, and which then may take the place of reflex sickness or vomiting. It is also very useful in the pruritus which occurs in the climacteric, or in elderly women, in whom it may be only part of a general pruritus, and also in those cases of women of all ages, where the urine simultaneously becomes of very low specific gravity, without any evidence of having a gouty or granular kidney as a remote cause.

In pruritus due to pediculi, ascarides, an irritable urethral caruncle, an endocervical polypus, early cancer of the cervix, distension of Bartholini's ducts or glands, the leucorrhœa of vaginitis, endocervicitis, and metritis, or the irritating discharges of advanced carcinoma uteri, or to a gouty or diabetic diathesis, the drug excels all others, cocaine inclusive, in affording relief, whilst endeavors are being made to remove the cause.

In two obstinate cases of uncontrollable pruritus of pregnancy, where this remedy only gave temporary relief, the patients were cured by applying iodine liniment to the angry-looking cervix uteri.—*Br. Med. Jour.*, April 14, 1888.

Crook (J. K.) on Nitro-Glycerine in Cardiac Diseases.—The author has observed the effect of the drug in twenty-eight different cases, and in only four has it absolutely failed. In all the others more or less relief was obtained, and some of the effects were most gratifying. Its effects are only temporary, even in cases independent of organic lesions. It may be regarded simply as a symptom medicine, and one

which probably exerts little if any permanent effect on the course of disease of the heart. It undoubtedly has its sphere in the treatment of painful and irritable conditions of this organ, however, and for the temporary relief of these conditions it seems to be rather more reliable than any other single remedy. — *Post-Graduate*, April, 1888.

MISCELLANEOUS.

Taylor (R. W.) on Xeroderma Pigmentosum.—In 1870 Hebra and Kaposi first published a description of the disease and called it Xeroderma. In 1877 and 1878 Dr. Taylor read papers containing the histories of seven cases of this disease before the American Dermatological Association, but did not then publish them, preferring to watch the cases over a long period of years, so as to thoroughly study their course before doing so.

The literature of the subject includes forty-one cases—two observed by Hebra and Kaposi, two by Geber and Kaposi, four by Kaposi, one by Heitzman, one by Duhing, two by Neisser, six by Rüder, quoted by Neisser, five by Vidal, three by Pick, three by Crocker, two by J. C. White, one by Dubois-Havenith, and seven by the author. The disease has been called by several names. The provisional name first given by the author was *angioma pigmentosum et atrophicum*, but in 1881 Kaposi published a paper on the subject in which he called the disease xeroderma pigmentosum, and this name is now generally accepted.

Clinical features.—The disease consists in the telangiectases, the pigmentations, and atrophic changes, all having intimate pathological relations. As sequelæ there are new growths at first benign, but may become malignant.

Age.—Many observers have failed to state or learn the date of invasion, but in twenty-six of the recorded cases it began before the end of the second year. In six of the author's cases the disease began about the sixth or seventh month, and in the seventh case at the fourteenth month. The weight of evidence therefore places this disease as one of early childhood.

Invasion.—The disease begins about the face as a smooth superficial erythema, looking like a sunburn, and with no impairment of health. The erythematous patches gradually creep over the face and neck, usually stopping with an abrupt margin at about the third rib. This condition lasts from one to several months. As this prodromal hyperæmia disappears pigmented spots, or telangiectases, appear irregularly over the affected regions. These spots are at first light-brown, but turn darker, even black. These are about the size of a pinhead, slightly if at all elevated, and irregular shapes. Scattered among these pigmented spots are the red or telangiectasic spots, less numerous, smaller, and very irregular in outline, but containing congeries of capillaries.

The hands may be similarly affected, but always to a less degree. The pigmentation is always a sequela to the red lesion, as is demonstrated by the microscope.

The further lesions are erratic; they come and go, but never entirely disappear, the disease becoming more or less rapidly severe. The period of activity is greatest in very early childhood.

Atrophic changes are soon superadded to the pigmentations, usually at end of the first year of the existence of the morbid changes. They occur on both sides of the body, but are not symmetrical. They often produce hideous deformities, by reason of the size and situation of the patches. The skin is rendered as thin as parchment, and nearly all the follicles are destroyed. Minute lines traverse these patches, which are frequently so transparent that the vessels can be seen beneath.

Upon the hands and feet atrophy is not so marked, except when the skin is stretched, as over the knuckles. In these atrophic patches there is a constant evolution and involution of the telangiectasic spots, often followed by pigmentations.

The atrophy of the skin is in proportion to the atrophy of the minute vessels, and its activity to the development of the red spots. The process goes on until all vessels in the skin have undergone increase and decay. Atrophic changes occur especially about the forehead, nose, and eyes, due, no doubt, to the excessive vascularity and exposed position of the parts, and as a result, ectropion, partial stenosis of nasal apertures, and other deformities occur. When the atrophic process is complete, no further pigmentation occurs, and a smooth, white, shining surface is left.

Hypertrophic changes take place often coincidentally with the atrophic process.

Epithelial new growths occur, consisting of plaques looking like keratosis senilis, which may be the starting-point for larger growths. At the junction of the skin with the mucous surfaces, their tendency is to form malignant tumors.

About the face they form sessile or pedunculated tumors whose surface, after shedding of their pigmented epidermal covering, are fungating. They are at first reddish or purple color, soft and compressible, like erectile tumors, but frequently become brittle and pale, and falling off, leave ulcers which may heal easily or extend in depth and breadth, surrounded by hard-crested edges, becoming the seat of malignant degeneration.

The period of greatest malignancy is under ten years, but nearly as great until twenty years. These tumors are of great variety, and often the seat of hemorrhage. They are often very malignant, but there is no evidence of metastasis.

Pathology.—The pigment is similar to that of melanotic new growths.

The little yellow, warty elevations undergo corneous transformation, and accompanied by a rapid increase of papillary vessels. The atrophic condition is like that of senile atrophy of the skin. With atrophy of the epidermis there is absence of pigment, while, where it is thickened there is much pigmentation. This production of pigments depends on the alteration of the vessels in the skin.

In the superficial layers of the derma, embryonic cells are abundant, together with a large quantity of elastic fibres in the deep layers of the papilla, which may have replaced the atrophied connective tissue.

In the majority of the pigmentations, the cell increase is not great, but in the keratosic patches it becomes constantly more abundant. In the fawn or light-colored pigmentations, the vessels are dilated and distended with blood, and they have their origin in the red spots. In the keratosic or warty patches there is much variation in the amount of cell infiltration and vascular change. This explains why some tumors are vascular and others firm and dry.

The occurrence of epithelioma at such early ages is due to the rapid changes going on in the epithelial layer of the skin, in the production and rapid disappearance of new papillæ and epithelium, and of the pigment-carrying elements.

Treatment.—No case of xeroderma has ever been cured. Our measures should be directed toward placing the skin at rest, and removing any possible source of irritation to the morbid parts.

Knowing that these pigmented warts are so apt to become malignant, they should be removed as soon as possible with the sharp spoon. In fact all tumors, whether large or small, should be removed as early as possible.—C. W. CUTLER, M.D.

Cook and Beale on a Case of Rapidly Fatal Chorea : Death in 130 Hours.—A. C., aged nine, was brought as an out-patient on October 27, 1887, suffering from chorea. The mother stated that on October 25th the child had had some difficulty in putting on her stockings, owing to slight loss of control over her right arm and leg. The mouth and eyes had been noticed to twitch next morning, and since then the irregular movements had become general, though most marked on the right side. The child had not taken food well, had slept badly, and been slightly delirious during the night, occasionally screaming and complaining of pain in the left hypochondrium. She had been very thirsty. The evacuations had been normal, and never passed unconsciously. She had been a fairly healthy child, and had passed through an attack of scarlet-fever two years previously without any known sequelæ. She had not been frightened, nor had she been in company with other choreic children, nor had any worms been seen.

When first brought under observation, on the 27th, the child was obviously very ill, with flushed face, hot skin, and terrified expression of countenance. The choreic movements were violent, and according to the mother were hourly becoming more so. The pulse were very rapid, varying between 160 and 170, but the respirations were only slightly increased. She was at once sent into the ward, where, after careful examination, a short systolic murmur could be made out at the apex, which was in the normal position. Only a few scattered crepitations could be detected in the lungs, the breathing being quite regular. The child kept constantly smacking her lips and frequently protruding the tongue, but there was no difficulty in deglutition.

October 28th, she slept very little and was very restless, being sometimes delirious and occasionally screaming. During the day the movements became so violent as to

render restraint necessary to prevent injury. The bowels were freely open; the urine was passed involuntarily, but a little, collected, was found to be free from albumen; the tongue was clean and moist, but the lips dry and cracked; the temperature was slightly raised, but never exceeded 101°. The heart's action continued at the same rate, or faster, and the pulse at the wrist became almost imperceptible. On the following day some difficulty was experienced in swallowing, and the girl became very noisy, frequently screaming and uttering inarticulate sounds; the respiration became irregular and jerky, and she died rather suddenly the same evening, the whole course of the illness having run between the morning of the 25th and the evening of October 30th.

At the post-mortem examination both lungs were found to be much congested at the bases, and the left pleura was adherent. The right side of the heart was slightly dilated and flabby, and contained some fibrinous clot and a little dark fluid blood; on the auricular surface of the tricuspid valve were a few punctiform patches of congestion. The left ventricle was firmly contracted, its muscular tissue very good. On the auricular surface of the mitral valve, between the hinge line and the free border, were numerous tiny patches of punctiform congestion, especially marked along the hinge line itself. At the free margin of the valve the attachments of the cordæ tendineæ were much thickened by lymphy vegetations, to a few of which slightly colored fibrinous clots were attached. There was no positive ulceration of the endocardial surface to be detected. The brain and upper part of the spinal cord were healthy, except for an extreme degree of anæmia at the pons and medulla. The tissue of these parts seemed quite normal on section. Other organs were healthy.

The case was treated with arsenic, morphine, chloral, and bromide of potassium, but in no case did the action of the drugs appear to have any influence upon the downward course of the disease.—*Brit. Med. Jour.*, April 14, 1888.

Matheson (A. R.) on Three Cases of Double Pneumonia Occurring Simultaneously in One Family.—Carroll D——, aged eight years; Rodger D——, aged six years; and Clarence D——, aged three and one half years, robust children, of healthy parents, were each attacked during the night of February 25, 1888, with symptoms affecting the respiratory organs, and attended with a high temperature.

A physician in the neighborhood was called on the morning of the 26th, and prescribed antipyretic and expectorant remedies. I was called on the 27th, and saw them about 9 P.M. The appearance of the children was remarkable from the close resemblance of their symptoms.

The skin was dry, hot, and inclined to duskiness or lividity. The physical signs in each case were moderate dulness on both sides with coarse mucous rales.

The youngest and the second have passed through the usual course of a severe acute lobar pneumonia, and are now convalescing.

The eldest continued to grow worse, temperature reaching 106° on March 1st (after that date did not disturb him to take temperature), dyspnœa was so great that he could not lie down, and added to this a hacking cough that was almost continuous, causing loss of sleep, restlessness, and intense distress, that was finally relieved by death on the 4th of March.

On autopsy eighteen hours after death the right lung was found completely solidified without any aërated portions. The anterior portions of the pleura on the right side gave evidence of an intense inflammation, while the posterior portion was but slightly affected. The right pleural cavity contained a large quantity of turbid serum mixed with fibrine and pus.

The left lung was much larger than the right. Its appearance was peculiar, dark, red, swollen, inelastic, and as if partially boiled; portions were hepatized and portions aërated, but the general appearance was unlike lobular pneumonia. The left pleura contained several ounces of serum. The pericardium was covered with a thick coating of fibrine, and when this exudation was peeled off it exposed a gray granular surface.

The pericardium contained a large quantity of pus and serum. The heart, kidneys, and liver were normal.

The only cause that to me seemed probable was an old sheet-iron stove that allowed the gas to escape in large quantities, which being inhaled acted as a direct irritant.—*Brooklyn Med. Jour.*, April, 1888.

Diabetes Insipidus in a Young Child.—Dr. Julius Weiszbarth of Buda-Pesth publishes an account of a case of

diabetes insipidus occurring in a little girl of only four and a half years of age. The daily quantity of urine was from about ten to twenty-two pints, the specific gravity being about 1002, and no abnormal constituents being found in it. The chief symptom was the violent and unquenchable thirst, the quantity of water drunk varying from fourteen to seventeen pints per diem. When attempts were made to withhold liquid the child became most distressed with thirst. She always seemed better when allowed to have as much to drink as she wished. By adding quinine to the water the quantity was reduced to five pints, but only for a day or two, for as soon as the child became accustomed to the bitter taste she drank as freely as before. No medication appeared to have any effect on the disease. After being about six weeks in hospital the child succumbed to an attack of diphtheria. Before death the quantity of urine passed diminished, as also the excessive thirst. The post-mortem examination revealed slight œdema of the medulla oblongata, diphtheria of the fauces and nares, strumous disease of the mediastinal and bronchial glands, tubercle in the lungs, bronchial congestion, hypertrophy and induration of the liver, chronic catarrh of the stomach, follicular enteritis of the large intestine, hypertrophy of the muscular structure of the bladder, and dilatation of the ureters. —*Lancet*, April 14, 1888.

Deformities of the Hands in Glass-Blowers.—At a meeting of the Académie des Sciences, on March 26th, M. Poncet, of Lyons, drew attention to a peculiar deformity of the hand in glass-blowers which, according to him, had never before been noticed. It consists in permanent flexion of the fingers on the hand; the little finger and the ring finger are more bent than the middle one or the index; the thumb is not affected. The flexion is most marked in the second phalanx, which is bent almost at a right angle to the first. The deformity is not, according to M. Poncet, due to fibrous bands, but to retraction of the flexor tendons. The phalangeal joints are more or less deformed, and show a tendency to subluxation. Most glass-blowers suffer from this deformity, which, as a rule, gets steadily worse as long as they continue working at their trade. The deformity is caused by their having to hold a metal tube, over three feet long and weighing about four pounds, which they have to keep constantly turning with their closed hands. They do this on an average eight hours a day, so that it is not surprising that even after a month or two complete extension of the fingers becomes difficult, and in a short time impossible. The deformity when fully established is permanent. It is known among the workmen themselves by the name of *mains en crochets* (hooked hands). *Brit. Med. Jour.*, April 14, 1888.

Lamb (D. S.) on Senile Hydrocephalus.—The specimen shown illustrated the atrophy of the brain that sometimes takes place in old age, as well as the compensatory dilatation of the ventricles that takes place at the same time, made necessary by the fact that the brain is in a hard case. The woman was old, said to be eighty-two years, and had had some dementia for an indefinite time, explained doubtless by the progressive atrophy. November 24th she was seized with left hemiplegia and died six days afterwards, the 30th. The post-mortem examination illustrated well the abundance of pathological material which is found in an old person. The brain was atrophied and its ventricles dilated; the ventricular fluid, as well as the subdural and subarachnoidal, was increased in quantity, but transparent and clear as water. There was some congestion of the dura mater. The arteries were markedly atheromatous, and there were clots in several of them. The spinal cord, as low down as it could be examined from the brain cavity, was atrophied. The thyroid cartilage was brittle, with chalky deposit, and broke with ordinary handling. There was a mucopurulent accumulation in the pharynx and larynx. The lungs showed small chalky and pigmented nodules in upper lobes. The lower lobe of the right lung showed sufficient recent pleurisy and pneumonia to prove in a weak person an adequate cause of death.

The heart and pericardium were closely attached to each other by old adhesions. The substance of the heart itself was fatty; the aortic and mitral valves, as well as the aorta, were atheromatous. There were old adhesions of the liver to the diaphragm. The liver itself was small, atrophied, but the gall bladder was much distended with bile, projecting several inches forwards from the anterior border of the liver. The spleen was much atrophied; the intestines were not opened. The kidneys both

showed contraction and small cysts, as well as some adhesion of capsule. The uterus was atrophied, but contained at the fundus and projecting into the cavity a polypus the size and shape of an almond; the uterine mucous membrane was covered with dark blood, so that we might say that the polypus was still active. The ovaries were atrophied; the Fallopian tubes dilated.—*Jour. Am. Med. Ass'n*, April 21, 1888.

Movable Spleen, with Torsion of the Pedicle.—Prof. V. Dittel recently discussed in the Imperial Medical Society of Vienna, a case of "splen mobile," with torsion of the pedicle, which was the cause of a very instructive diagnostic error. The patient, a woman, æt. twenty-four, had suffered for the previous two years from symptoms of cystitis, which were due to chills, according to the statement of the patient. In September, 1887, the patient remarked that the urine had a bloody tinge, and for the first time also noticed the presence of a tumor on the right side above Poupart's ligament. On admission into hospital the patient was exceedingly pale and emaciated; the internal organs were quite normal. The region which corresponds to the spleen was somewhat tender to the touch. The abdominal parietes were flaccid, and above the right Poupart's ligament a tumor of the size of a man's fist could be felt; the form of the swelling was that of an enlarged kidney. The tumor was movable only to a slight extent, and caused no great pain. The urine was bloody, but was otherwise normal. Most of the appearances in this case led Dittel to suggest that the hemorrhage derived its origin from the kidney, and that the tumor felt was the detached and degenerated kidney. He performed the operation for removing the kidney, and made a perpendicular section along the linea alba from the navel as far as the symphisis. After the section of the abdominal parietes and the peritoneum the swelling became visible; it was covered by the epiploön, which showed excessively distended veins. A double ligature was applied, and the tumor was incised, but severe syncope, with cessation of respiration and pulse, suddenly supervened. All the means for bringing the patient again to life failed, and the patient died, though the operation had lasted only almost one hour, and the quantity of chloroform used did not exceed ten grammes.

Dr. Zemaun showed the specimen, and discussed the results of the post-mortem examination of this interesting case. The swelling filled up the whole of the small pelvis, and a part of the tumor even protruded from it. The swelling could be removed to the right side, but it had no connection with the uterus. A cord of the form of an umbilical cord, which contained a thick vein, extended from the swelling towards the left hypochondriac region. The spleen was not present in its normal place; the left kidney contained several small abscesses, and presented an amyloid degeneration; the bladder was very small; its wall thickened by callous masses, and its mucous membrane hyperæmic. The right ureter was embedded in a callous tissue, and the right kidney pervaded with large abscesses, which were in direct communication with the pelvis of the kidney. The tumor which had been felt in the pelvis during life was formed by the spleen, which had turned thrice around the gastro-splenic ligament, and which was enlarged to eight times its normal size, a part of it adhering to the pelvis.

To Dr. Dittel the patient had stated that she had never suffered from intermittent fever; the tumor lay on the *right* side of the abdomen, and moreover movable spleens were very rarely met with, whereas movable kidneys were found almost every day.

Prof. v. Bamberger reported a similar case, in which he had also been mistaken as to the diagnosis, owing to a superficial examination. The sharp margin of the spleen was very characteristic. The correct diagnosis in this particular case was made later on by Prof. Pawlik, after the patient had also made some important ætiological statements, viz., that she had suffered from intermittent fever, and that the tumor arose quite suddenly, after the patient had felt something like a "tearing off" while dancing.—*Medical Press*, April 11, 1888.

Menstrual Bleeding from a Laparotomy Scar.—Professor Rein recently showed (*Vratch*, No. 7, 1888, p. 136) a menstruating woman from whom he had about three years before removed a cyst of the right ovary weighing 37 pounds, fixing the pedicle in the abdominal wound. The patient soon recovered, and the wound healed, but at one part of the scar there remained a diminutive slough, which fell off just before the beginning of menstruation, its separation being followed by a constant flow of blood from the denuded

surface during the whole catamenial period. The phenomenon had regularly recurred monthly ever since. As a rule, the scar begins to bleed somewhat earlier than the uterine flow makes its appearance. The menstrual blood from the cicatrix has a characteristic odor. It is difficult to explain such an occurrence. Possibly, a Fallopian tube or one of the uterine cornua had been stitched together with the pedicle into the abdominal wound. However, Professor Rein hopes soon to ascertain the nature of this interesting and rare case, since the patient must undergo a second laparotomy for disease of the left ovary.—*Br. Med. Jour.*, March 31, 1888.

Hall (J. N.) on Cystocele Obstructing Labor—Delivery by Version.—Mrs. I., thirty-eight years of age, eleventh pregnancy, labor pains since waters broke, about forty-eight hours ago. Ten hours before seen she called a midwife. The latter, finding something which prevented progress, summoned aid. When seen by me, 10 A. M., October 23d, pains were severe, but accomplishing nothing; head presenting, O. R. A.; marked caput succedaneum; bladder prolapsed in front of the head; pelvis the largest I had ever seen.

An elastic catheter was passed with difficulty, and three ounces of urine removed. From the swollen condition of the parts and the exhaustion, it was thought that delivery would not occur without assistance. Under ether, the head was held well down from the abdomen, but was still so movable that the forceps were abandoned, chiefly from fear of bruising the swollen soft parts. Hence the child was delivered by version with great ease. Weight, about nine pounds. The caput succedaneum extended from one parietal eminence to the other, and was two inches antero-posteriorly.

The convalescence was uninterrupted.—*Boston Med. and Surg. Jour.*, April 19, 1888.

Bradley (A. E.) on Physiological Actions of Aconitum Fischeri.—From experiments made with the view of determining the physiological actions of *aconitum fischeri*, I have drawn the following conclusions:

1. That it is a rapidly acting poison.
2. It kills by failure of respiration.
3. In sufficient doses it is a depressing systemic emetic; it has the effect of producing the aconite tingling.
4. It has little or no effect on the motor nerves; if any action at all, only slight impairment of conductivity.
5. By systemic action it has no effect on the energy, contractility, or irritability of muscular tissue.
6. That in its systemic action it is a paralyzer of the sensory nerves.
7. It first paralyzes the sensory nerve-ends, next the nerve trunk, and finally the spinal sensor ganglia.
8. Its action on the sensory nerves precedes its action on the motor.
9. When brought directly in contact with the sensory nerve-ends it destroys, or paralyzes for a time at least, the functions of those parts.
10. Its action on the posterior extremities always precedes its action on the anterior.
11. That it has no effect on Setschenow's inhibitory centre.
12. That it lessens, finally abolishes, spinal reflex excitability by its action on the sensory apparatus.
13. The motor portions of the cord are but little or not at all concerned in the abolition of reflex excitability.
14. That it is a heart poison.
15. After a preliminary slowing the action of the heart is rendered irregular, rapid, and feeble in both warm- and cold-blooded animals.
16. The slowing is probably due to stimulation of the cardiac inhibitory ganglion; the final action is due to paralysis or removal of inhibition, probably caused by paralysis of the above-mentioned ganglion.

As the cardiac muscular fibres will not respond to faradic stimulation, a possible action of these tissues, may be a factor in the effects produced on the heart.

17. The heart finally stops in diastole, due to over-stimulation and failure of its motor ganglia.
18. That it causes a fall in blood pressure preceded by a very slight rise.
19. This fall is secondary, and due to its action on the heart.
20. The slight rise is due to the momentary, preliminary, stimulation of the heart.
21. That it has no effect on the vasomotor centre or system.
22. That its action on the respiratory centre causes death by failure of respiration.
23. That it has no effect on the organs of reproduction, and is not an abortifacient.
24. That in its systemic action it always causes dilatation of the pupil.
25. Locally it has no effect on the pupil.
26. That in many respects it has actions identical with *aconitum napellus*.—*Weekly Med. Rev.*, April 21, 1888.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital.

VOL. V., NO. 19. May 10, 1888. WHOLE NO. 67.

CONTENTS.

	PAGE
Occasional Report on Diseases of the Nose, Mouth, and Throat	221
Therapeutics	224
Medicine	228
Pathology	232

OCCASIONAL REPORT ON DISEASES OF THE NOSE, MOUTH, AND THROAT.

BY CHARLES H. KNIGHT, M.D.

M'Bride (P.) on Empyema of the Superior Maxillary Antrum with Only Nasal Symptoms.—The discharge in these cases is generally unilateral, but a few cases have been reported by Ziem in which the affection existed on both sides. Pain, swelling, and distension of the osseous walls of the cavity are by no means invariable signs. The quantity of discharge may usually be altered by changing the position of the head. Face-ache or discomfort in the region of the cheek is commonly present. Frontal headache may be complained of, in consequence of closure of the opening into the frontal sinus, by reason of the swelling of the mucous membrane. Secondary inflammation of the frontal sinus may occur. In order to differentiate between discharge from the frontal and from the maxillary sinus, Fraenkel is accustomed to carefully cleanse the nostril, and then make his patient sit with the head down, in which position drainage from the frontal sinus is impossible. Other conditions may be eliminated by careful rhinoscopic examination. One symptom, not often referred to, has been noticed by Cotterill, namely, marked redness of the gum corresponding to the affected antrum. The most common cause of the affection is found in decayed upper teeth, usually the bicuspids or first molar. It may result from prolonged nasal catarrh, or from the use of douches. Two cases are given by the author. The method of treatment suggested by Stoerk, the introduction of a tube into the natural opening of the antrum, is not approved. It is preferable to make a counter-opening through the socket of a tooth, through the alveolar process, or finally through the outer wall of the nose near its floor, as proposed by Mikulicz. Irrigation may then be practised with solutions of borax, or iodine, or chloride of zinc. The author is not yet prepared to say that the insufflation of powders is more effectual. — *Edinburgh Med. Jour.*, April., 1888.

Bosworth (F. H.) on the Use of Caustics in the Nasal Cavities.—The author's plea for the use of caustics is based on his theory that in so-called nasal catarrh there is an actual decrease in the amount of secretion. In health the large amount of transuded serum is not noticed because of the free circulation of air producing vaporization. Let nasal respiration be impeded, the secretion, though lessened, becomes vitiated, and makes its presence felt as a source of annoyance and discomfort. Neither astringent nor disinfectant applications are indicated or efficacious. Caustics are, however, of much value. The membrane, having first been exsanguinated and contracted by means of cocaine, is "buttoned down" by the application of the caustic to its most prominent part. In this way the blood-supply and nutrition of the membrane are lessened, and the hypertrophy becomes diminished. The idea is to pin down the mucous membrane, not to destroy an extensive area. Strong preference is ex-

pressed for chromic acid over the galvano-cautery and other agents. It is claimed that the acid will accomplish as much, is more simple, and can be applied more nicely than the electric cautery. The author mentions having permanently arrested colds in the head, immediately relieved headache, and controlled bronchial attacks and winter cough by this method. He claims never to have seen a cicatrix result from his way of using the acid, its action being limited to the epithelial layer of the membrane. [How is it possible to "pin" or "button down" the mucous membrane, unless the mucosa or the submucous layer be acted upon by the caustic? It is difficult to understand how permanent results can be obtained by such superficial cauterizations as the author describes.]—*New York Med. Jour.*, March. 10, 1888.

Cauterization and Forcible Removal of False Membrane in Diphtheria.—The following opinions are expressed editorially in the *Boston Med. and Surg. Jour.*, March 8, 1888.

With regard to energetic cauterizations, and the frequent clearing of the throat of false membranes by swabbing, there has of late years been general agreement among medical authorities in avoiding these harsher methods, and for the following reasons:

(1) Experience has proved that the violent removal of false membranes does no good, the diphtheritic patches being speedily re-formed. Only when the patches are already loose and ready to separate of themselves, is their removal by the brush or swab really beneficial.

(2) The milder caustics, as nitrate of silver and perchloride of iron, do not penetrate deeply enough to destroy the multiplying infection, and their frequent application adds to the discomfort of the patient.

(3) The stronger caustics (undilute carbolic acid, muriatic acid, caustic potash) are very painful, not easily limited in their action to diseased parts, and are likely to cause dangerous swelling of the tissue.

(4) Add that the patient is often a young child, whose opposition and whose struggles make the difficulties in the management of caustic applications wellnigh insurmountable.

(5) Finally, cauterization of the throat in children has often provoked spasm of the glottis and death from asphyxia; it has also caused lesions of continuity of healthy parts, which have been speedily covered with false membranes.

Dickinson (W. H.) on the Tongue as an Indication of Disease.—Three lectures, delivered at the Royal College of Physicians, in which the tongue is considered as an index of constitutional states, are worth reading.—*London Lancet*, March and April, 1888.

Richardson (W. H.) on a Case of Sarcoma of the Tonsil Removed by External Incision; Recovery.—This was a case of round-celled sarcoma, in which the diagnosis was confirmed by microscopical examination. The pharynx was not opened during the operation. Most of the tumor was shelled out, and the rest was removed by dissection. There had been no recurrence ten months later.—*Boston Med. and Surg. Jour.*, Feb. 23, 1888.

Smith (A. H.) on Sarcoma of the Mouth, Reaching a Fatal Result in Thirty-four Days.—The disease began as a small elastic tumor in the roof of the mouth, adjacent to the first molar tooth on the left side, and was thought to be an abscess. Its subsequent course suggested malignancy, and the suspicion was confirmed by microscopic examination. The age of the patient was three and a half years. The disease rapidly invaded the palate and implicated the lower jaw. Two days before death a tumor, probably of a similar nature, developed in the right side of the abdomen.—*The Post-Graduate*, Jan., 1888.

Kemp (E. A.) on Paralysis of the Posterior Crico-Arytenoid Muscle, from Swallowing a Marble.—The prominent symptoms in the case were inspiratory dyspnœa, aggravated by exertion, and paroxysms of coughing during sleep. Loss of appetite was noticed, but no mention is made of dysphagia, or of the presence of pulmonary signs. The laryngoscope showed absence of laryngitis and approximation of the cords during inspiration. The case had been variously diagnosticated asthma, laryngitis, and bronchitis. It seems that three months previous, nine days after having received a blow with a stone upon the left side of the head near the neck, the patient was confined to his bed for three weeks with soreness and pain in the head. There was at times some mental obscurity, and the head was drawn to one side. Improvement was gradual. During conval-

escence trouble in breathing, especially at night, was noticed. This increased, until finally, during an excessively violent paroxysm of dyspnœa, a marble was coughed up. This episode was followed by gradual disappearance of the dyspnœa and stridor. The theory of the writer of the paper is that the marble was impacted at the orifice of the œsophagus.—*Boston Med. and Surg. Jour.*, April 19, 1888.

Fracture of the Larynx.—The cause of the injury was a blow from the elbow over the larynx during a game of football. Crepitus and subcutaneous emphysema were marked. Dyspnœa was practically relieved by punctures, but finally tracheotomy had to be done. It was found that the left ala of the thyroid was fractured, but not completely detached. Death occurred on the twelfth day from septic pneumonia.—*London Lancet*, March 3, 1888.

In the *Medical News*, March 17, 1888, a case of fracture of the larynx, caused by a base-ball, is reported by Dr. M. H. Fussell. Tracheotomy was done, but the patient died in about three hours, apparently from pulmonary congestion and œdema. No autopsy was made, but the tube and the trachea below it were found free from obstruction. The author suggests that death may have resulted from pressure on the pneumogastrics in the neck, the swelling of that region having steadily increased from the time of the accident. This seems to be the seventieth recorded case of fracture of the larynx and the fifty-fourth death.

Kidd (P.) on a Case of Angioma of the Larynx.—The growth was attached to the left vocal cord at its anterior extremity. It had a flat pedicle, and during inspiration would sometimes almost disappear in the sub-glottic region. The tumor was oval, imperfectly bilobed, dark-red in color, with a faintly granular but not uneven surface. It was easily removed with Mackenzie's forceps. But little bleeding followed; the cord remained much congested for several days, and then cleared up, the voice becoming quite normal. Microscopically the neoplasm was found to be cavernous angioma, closely resembling that variety sometimes found in the liver. This is one of the rarest of laryngeal lesions.—*London Lancet*, March 17, 1888.

Papillomata of Larynx.—A child, three years of age, had for nine months had occasional difficulty in breathing, with change in quality of the voice. The laryngoscope showed a fringe of warty growths on each vocal cord. A sudden paroxysm of dyspnœa necessitated tracheotomy. Three weeks later febrile symptoms developed, and death ensued within forty-eight hours, no cause being discoverable for the high temperature (107.2°). The microscopic structure of the growths was found to be that of papillomata.—*Glasgow Med. Jour.*, March, 1888.

Wolfenden (R. Norris) on Perichondritis of the Larynx.—This case has several interesting points. A man, forty-three years of age, presented himself with a subglottic swelling beneath the right vocal cord, producing hoarseness but no dyspnœa. Malignant disease was suspected. Eight days later tracheotomy was done on account of urgent dyspnœa. The vocal cords were almost hidden by swelling of the parts above them, and externally over the thyroid some tenderness and swelling were observed. Two days later a laryngoscopic examination showed increase of the swelling. The odor of the breath was offensive, and there was copious discharge of muco-pus through the tracheal wound. Expectoration was free in consequence of a bronchitis which supervened. Iodol dressings and insufflations were used with benefit. Ten days after the tracheotomy a small piece of cartilage was expectorated, and decided improvement followed. Scarifications were made with the laryngeal lancet, and vapor pini sylvestris was used. There was a slight degree of dysphagia and constant pain over the lower part of the left wing of thyroid. For more than a month the case progressed favorably. The patient then expelled quite a large piece of bone (?), and in a day or two had a return of bad symptoms. The larynx was again scarified, and an ice-bag was applied. The improvement from this time was slow but without interruption. Four months after the tracheotomy the use of Mackenzie's three-pronged dilator was resorted to, so that in the course of three weeks it was possible to dispense with the trachea tube. Iodide of potash was given, although no history of syphilis could be obtained. Iodol was found to act little better than iodoform. Headache was relieved by antipyrin. Subglottic laryngoscopy through the tracheal wound was attempted, but did not succeed. Chronic laryngitis seems to have been the cause of the lesion. The

paper closes with a brief reference to a similar case, arising also from chronic laryngitis, in which the cricoid was involved, and for which tracheotomy was done.—*Brit. Med. Jour.*, April 14, 1888.

O'Dwyer (J.) on Intubation in Chronic Stenosis of the Larynx, with a Report of Five Cases.—"Had intubation of the larynx proved a complete failure in the treatment of croup, I should still feel amply repaid for the time and expense consumed in developing it, for I believe that it offers the most rational and practical method yet devised for the dilatation of chronic stricture of the glottis."

The cases reported are all of extraordinary interest. His experience leads O'Dwyer to believe that a tube may be worn in the larynx indefinitely if necessary, provided it be made of hard rubber or gold, which are not liable to receive a deposit of calcareous material. In one of the cases reported an ordinary tube was retained for ten months. It remained unobstructed, but on removal, which required some force, it was found covered with coarse calcareous granules and much corroded. The paper closes with a consideration of stenosis of the trachea and a description of a "snare" for the removal of laryngeal and particularly subglottic growths.—*N. Y. Med. Jour.*, March 10, 1888.

Kidd (G.) on Tracheotomy in Laryngeal Phthisis. — The author quotes from Moritz Schmidt, who reported several favorable cases at the last meeting of German Naturalists and Physicians. Schmidt gives four indications for the operation: (1) Stenosis, in any case, at an early stage. (2) Severe laryngeal disease with relatively little affection of the lung, even where no stenosis exists. (3) Rapidly advancing laryngeal disease before dyspnœa ensues. (4) Pain on swallowing. In four cases reported by Kidd, the indications above enumerated were present to some degree, yet the results were far from equal to those of the German observer. At first there may have been moderate relief, but this condition was followed by one of decidedly increased misery, either from irritation caused by the tube, or in consequence of difficulty in expelling the secretions. Particular attention is drawn to the interference with the mechanism of cough seen in laryngeal phthisis. The author concludes that the opinion of Mackenzie and Cohen, to the effect that stenosis furnishes the only indication for tracheotomy in laryngeal phthisis, should be accepted.—*London Lancet*, March 31, 1888.

Thornton (G.) on Tracheotomy Tubes.—The various tubes in use are described and illustrated. The fenestra in the upper wall of the tube is objected to, as being unnecessary and likely to injure the mucous membrane. Vulcanite tubes are objectionable, since they are fragile and likely to break, unless made very thick and clumsy. The bivalve should be discarded. The best tube, in the opinion of the author, is Durham's right-angled canula, but it might be improved by lengthening the tracheal portion.—*London Lancet*, April 7, 1888.

In a communication to the *Medical Press*, March 21, 1888, by Dr. G. A. Abrath, tracheotomy tubes made of woven catheter material are recommended.

THERAPEUTICS.

Ely (J. D.) on Phytolacca Decandra in Bronchocele.—The author has lately had six case of bronchocele under treatment with the drug.

Of this series of cases four are females and two males, their ages ranging from twelve to forty-five years.

Four have been discharged cured, and one of two still taking treatment is very nearly cured, in fact would have been cured before this had treatment been taken regularly.

Three of the four successful cases were treated with phytolacca alone, and the one nearly cured is using it singly.

I do not mention this, however, because I think it the best method of treatment, but to show the positive curative effect secured by testing phytolacca singly—the only true way to determine the exact value of a drug,—as well as illustrate that it is the most active curative agent in the prescriptions used, as I have always claimed it to be.

I still think it best to give some good tonic with the phytolacca, as it is indicated in most cases, and, it is my observation, hastens the cure.

Three of the series of cases to which I call attention now are selected for special mention, as they seem to me of more than common interest and value.

Number one illustrates that it is advisable to be cautious in using phytolacca, as it records the only unpleasant effects I have observed of it, though the result was, happily, favorable.

Mrs. W., aged 45, had been afflicted with goitre for nearly 35 years. I prescribed for her phytolacca to be used externally, and taken in five-drop doses, alternating with a prescription of dialyzed iron, three times a day.

I was surprised to learn that a single dose of the phytolacca as ordered caused much nausea, and that the second produced free emesis, and such prostration as to greatly alarm the patient and her family.

Having never before had any bad effect from prescribing phytolacca, I naturally ascribed the unpleasantness in this instance to other causes, and determined to try it again. To see if I could discover any other cause, however, I stopped giving it for a week, when, without the knowledge of the patient, who said she would take no more of it, I gave, in combination with dialyzed iron and glycerine, phytolacca in one-drop doses, to again test its effects.

The phytolacca again caused such unpleasant stomach trouble that the lady refused to take further internal treatment, and did not. However, on my urgent request, she continued the local use of phytolacca and, in about four months, the enlargement of the glands had disappeared.

I cannot satisfactorily account for the unpleasant effects the phytolacca produced, though it may be that the condition of the patient caused by the change of life, through which she was then passing, made her more susceptible to its toxic effect.

Case N. 2 is that of a boy, twelve years of age, who was brought to me for treatment of recent swelling of the groin and popliteal space. His leg was semiflexed and he was unable to walk; the swellings were hard and painful; the temperature 100.

I noticed that the glands of the neck were also enlarged, but they were not sensitive or painful. On inquiry I learned that it had been so for a year.

I prescribed:

℞ Tinct. aconiti rad., gtt. . . . . x.
Tinct. phytolaccæ decan., gtt. xx.
Aquæ . . . . . ʒ iv.

M. Sig.—One teaspoonful every two hours, and ordered tincture of phytolacca applied, full strength, to the enlargements, three times a day.

In ten days the swelling in the groin and popliteal space was gone, and the boy able to attend school.

In about three weeks the enlargement of the thyroid glands disappeared under the local use of phytolacca alone.

This is the most speedy cure of any case of goitre I ever treated, and, with the exception of the ten days noted, as phytolacca was used singly, it furnishes one of the best proofs of its curative action and value.

Case No. 3 is exophthalmic goitre of six years' standing. Patient a female, aged twenty-seven years. Another physician had treated her without success, and she came to me August 2, 1887.

She had all the nervous symptoms characteristic of the disease; was anæmic; pulse very irregular and sometimes so rapid that I was unable to count it. Both thyroids were much enlarged, and the eyeballs were very prominent. The bruit sound produced by the blood passing through the carotid arteries was such as led me to think aneurism existed. Menstruation, which appeared at the proper age and had always been regular before the glandular enlargement appeared, had been absent for a year.

Without promise of success further than removal of the enlargements of the glands, I began treatment, giving first, in combination, phytolacca with dialyzed iron and glycerine, and ordering applications of the phytolacca tincture, according to my usual method.

Of other treatment, veratrum viride and pulsatilla were first given to control the heart's action and the nervous symptoms—one drop dose of each every four hours. Scutillaria tincture in one-half teaspoonful doses, with one to two drops of Cactus grandiflorus, was substituted for the above for a time, and with good service.

To correct the menstrual derangement I gave the following, which I have found useful in many other cases, particularly dysmenorrhœa and where the menses are delayed on account of taking cold:

℞ Fl. ext. cimicifugæ rac., ʒ ij.
Fl. ext. pulsatillæ nig., ʒ j.
Syr. simpl., q. s., ad. ℥ iv.

M. Sig.—One teaspoonful before each meal for two or three days before the expected period, and, at the time, every three hours till the flow becomes normal, when it should, usually, be discontinued.

The veratrum was omitted when my patient was taking the above.

Under the treatment noted she has improved quite rapidly. She gained sixteen pounds in weight the first four months, menstruation reappeared and has been normal and regular for the past three months, so that the cimicifuga and pulsatilla have not since been required.

The glandular entanglement is hardly noticeable. The unpleasant nervous symptoms have mostly disappeared. The bruit heard over the carotids is not nearly so pronounced, though still easily recognized. Pulse regular, but yet too rapid. The appearance of the eyes has changed but little, if any.

The patient expresses herself as feeling well, and has hopes that by continuing treatment she will fully recover.

While complete recovery seems to me doubtful, the result obtained is so encouraging that I shall continue treatment in expectation of seeing greater improvement, at least, if not the complete cure of the case so much desired.

In concluding, I would take the opportunity to again request physicians to give phytolacca a fair trial according to the methods I have suggested, and to report results, believing, as I do, that it will prove its superiority as a therapeutic agent in the cases for which I have recommended it, and that it will amply repay further investigation.—*Medical Age*, April 10, 1888.

Gubb (A. S.) on Antiseptic Superstitions.—Experience shows that antiseptics as a class, in doses which it is safe to use, only retard putrefactive changes, and this often only to a trifling extent. The prompt and instant removal of materials liable to undergo putrefactive changes is the only real protection against their taking place, and agents which only retard the process are apt to prove a delusion and a snare.

When we turn from the employment of disinfectants and antiseptics in surgery to their domestic use, their arrant futility, except for temporary and strictly localized conditions, is more striking than ever. The sprinkling of a dilute solution of carbolic acid or Condy's fluid, or the placing of a little chloride of lime or other preparation in a saucer, is and must be absolutely without importance. Deodorizers they doubtless are, but this property is not an unqualified advantage. Like salicylic acid in milk, they may serve to mitigate the effect of want of cleanliness, but for that very reason their use is to be deprecated, since, without them, a determined effort might be made to insure purity of air by the removal of the causes of contamination by proper ventilation.

The sooner the real facts of the matter are ascertained and freed from their semi-superstitious surroundings, the more rapidly will the fundamental principles of absolute cleanliness be understood and practised.—*Medical Register*, April 28, 1888.

Brock (C. W. P.) on Morphinic and True Tetanus.—The author alludes to three cases of fatal tetanus that have occurred in his vicinity in the persons of morphomaniacs who took the drug hypodermically. He concludes that they may have been due either to—

(1st) True tetanus, established by the use of a foul syringe, or a filthy solution of morphine—either or both of them being contaminated by the presence of the pathogenic germ on which tetanus depends;

Or (2d) to the effects produced by the continued use of an impure article of morphine, rendered impure by the presence of one or more of the tetanous group of alkaloids, papavarine, narcotine, codeine and thebaine, the action of which on the spinal cord produces a set of symptoms that are scarcely, if at all, distinguishable from true tetanus.—*Va. Med. Monthly*, April, 1888.

Porter (W. H.) on the Harmfulness of Some Antipyretics in Pneumonia.—As I believe the successful treatment of pneumonia depends upon the increase of blood through the lungs, we should not employ cardiac sedatives unless we meet our case before the first twenty-four hours; by the early use of stimulants we get an increased circulation and a resolution by the fifth or sixth day, but this treatment increases the fatty degeneration, and we must pay special attention to the visceral organs and their nutrition, so as to aid them in their heavy work of removing the effete material.

As the result of the large absorption of effete material we must have a high temperature (104–5). This increase in temperature is not a danger, it is the effete material which is dangerous; therefore antipyretics are detrimental, unless the effete materials are at the same time eliminated. I think the coal-tar antipyretics reduce temperature

by retaining these substances and producing a condition of collapse. Of course some patients are able to withstand the disease and these remedies as well, but that they are harmful I have no doubt. A German physician admits that he has killed several people by treatment with antipyretics, and I have no doubt that the use of these drugs in this city has been fatal in many instances. We must now exclude all those antipyretics which retain the effete material, and use only those which help its elimination. To this class belongs salicylic acid.

It has been said that there is a decrease of chlorides in pneumonia. In the first twenty-four hours there is a decrease of chlorides in the urine, but after that we have an increased excretion in the urine, unless there is a new increase of inflammation in the lung tissue, then there will be a continued decrease. With this point in mind, we can often judge of the course of a pneumonia by the frequent examination of the urine alone in cases where the patient is too weak to bear frequent physical examinations.—*The Post-Graduate*, April, 1888.

Humphrey (H. S.) on the Carbo-Oxygen Treatment for Consumption and Other Forms of Wasting Disease.—I emulsify cod-liver oil, and introduce it well into the bowel beyond the internal sphincter. One ounce so placed will not only remain but be rapidly absorbed, and no traces of it could be found after an hour's time. After introducing the oil I allow my patient to rest for half an hour, then slowly inject from two to four pounds of pure oxygen gas, using it freely, well knowing from long experience, both by inhalation and injection per rectum, that its artificial assimilation is most difficult to obtain. Introduced into the bowel the gas is rapidly absorbed, and passing with the portal blood through the liver, it is soon thrown to the lungs from the heart. The carbon (oil) passing the epithelial frontier of the intestines, is taken up by the lymphatic system, reaching the heart by way of the sup. vena cava, and passing through the pulmonic capillaries, meets the oxygen, and intimately combining therewith, these elements are thrown through the general circulation to every tissue of the body.

I have been using the above method now nearly four months, am taking careful notes of all cases treated, and am greatly pleased with my success so far.—*Med. Age*, April 10, 1888.

Murrell (W.) on the Use of the Ipecacuanha Spray.—The author dilutes wine of ipecac with an equal part of water and gives inhalations of a spray of the same. By a daily use of an ounce or so of the mixture he claims to cure bronchial catarrh, winter cough, and aphonia from congestion of the vocal cords, while he relieves the symptoms of fibroid phthisis and hoarseness due to laryngeal ulcers.—*Med. Register*, May 5, 1888.

Ellis (W. P.) on Quebracho in the Treatment of Dyspnœa.—Up to the present time the author has used the drug in seven cases, distributed as follows: one of abdominal dropsy, causing dyspnœa; two of chronic bronchitis, with pulmonary emphysema; and four of tubercular disease of the lungs; and in all of them it was beneficial to a degree beyond his expectations, in no case failing to materially increase the comfort of the patient.—*Gaillara's Med. Jour.*, May, 1888.

McKeown (D.) on Eye Operations: Bromide of Potassium.—*The Journal* has recently contained several contributions describing methods of employing cocaine in squint operations, the aim being to render the operation painless. Mr. Browne says: "Squint operation, even on nervous, frightened children, can be done painlessly." Immunity from pain is not enough for the "nervous, frightened" child, whose fear mustbe allayed. Cocaine will not banish alarm. We are all, however, familiar with the soothing influence of bromide of potassium in emotional disturbance, and yet the virtues of this drug do not appear to have been utilized in relation to operations. It is now my practice to give to children who are to undergo operation a full dose of the drug, and operate during the calm which ensues. I now speak not of squint operations merely, but of eye operations in general. The suggestion I make commends itself; it does not need much advocacy. I shall mention only one recent case: C. H., aged 5, had double congenital cataract, a considerable portion of the lens being transparent. For both eyes the procedure was the same—needling, and several days afterwards linear extraction. On each of the four occasions cocaine was instilled, bromide (40 grains for the extraction) administered, the opera-

tion performed without difficulty, and followed by sound sleep. I tried to tear the capsule of the second eye without bromide, but the boy was unmanageable.—*Br. Med. Jour.*, April 21, 1888.

Sheaf (E.) on the Toxic Action of Extract of Eucalyptus.—A few days ago, a male patient, aged twenty years, took by mistake about five drachms of extract of eucalyptus, at 10.45 P.M., and laid himself down in bed again, after going to attend to a sick relative in the same room. Near 12 o'clock he felt faint and giddy, and as if he was being lifted up by the heels and his heels pulled up over his head. He also began to feel inclined to say all his thoughts aloud, and found some twitching going on involuntarily in his fingers, Thinking dreamily he might be poisoned. he drank a large glass of cold water, but did not vomit. His wife, aroused to his condition, came for me, and at 1.20 A.M. I found him with weak, rapid pulse (120), but quite sensible, and complaining of the above symptoms. Free vomiting (smelling and tasting strongly of eucalyptus) was caused by administration of mustard and water.

On page 840 of Dr. Lauder Brunton's "Materia Medica," he says: "Eucalyptus acts chiefly on nerve centres; depression of brain, medulla, and heart; drowsiness, feeble respiration, lowered blood-pressure, and fall of temperature. . . . Death from paralysis of respiration." At page 798 of the same book, caffeine is said to "stimulate medulla and cardiac centres, and raise the blood-pressure."

As I was unable to find in any book, or remember an antidote for eucalyptus, I hastily prepared a hypodermic injection as follows: Caffeine, 20 grains; salicylate of soda, 17½ grains; water, 1 drachm. After the emetic had acted, I injected into the arm six minims of the solution. All unpleasant symptoms speedily disappeared, and we sat talking till 3.30 A.M., when I left him apparently recovered.

He called upon me in the evening of the next day, said he was sleepless after I had left him, for a couple of hours, got up at noon; the urine had a peculiar odor, and there was some diarrhœa of a blackish color; he had also pain in the end of the penis and the right testicle (which was drawn up). The dose of extract of eucalyptus is about fifteen minims.—*Br. Med. Jour.*, April 21, 1888.

MEDICINE.

Decaisne (E.) on Smoker's Vertigo.—Of the sixty-three subjects observed the age ranged from twenty-nine to sixty-six years, forty-nine being over fifty years of age. More than half had dyspeptic troubles, alternate constipation and diarrhœa, dyspnœa, polyuria, more or less abundant sweats, insomnia, and palpitation. One third of them had an intermittent pulse and a granular pharyngitis, some had emphysema, aphthæ, amblyopia, and hemoptysis. In thirty-seven young subjects the vertigo occurred in the morning. In a third of the cases the vertigo commenced as the profuse sweat stopped and as the secretion of urine lessened.

Eight cases had been treated for cerebral congestion or cardiac disease, and had been bled, repeatedly purged, blistered, and given digitalis. In one case the author thinks that bleeding was responsible for the fatal termination of a case.

In twenty-eight cases the vertiginous attack was stopped when at its height by the hypodermic injection of ether. To cure a case tobacco must be stopped, and laxatives, as magnesia, with bitter tonics and tepid baths given. In thirty-seven young subjects the vertigo disappeared by allowing them to smoke after eating.—*Gaz. des Hôpitaux*, April 19, 1888.

Mitchell (S. W.) on Locomotor Ataxia Confined to the Arms; Reversal of Ordinary Progress.—The patient was a doctor fifty-five years of age, and in active practice until two years ago. About July 1, 1887, his hand became unsteady in writing. This unsteadiness was not shown in his writing, and there was no tremor. He discovered that there was a numbness in the finger-tips of both hands, extending up the arms and throughout the shoulders, chest, belly, and back. About September this was slightly present in the toes, but more distinctly afterwards.

The patient has slight œdema of the legs, and has a yellow pallor of the skin. In the blood the percentage of red corpuscles is diminished about one third, and the coloring matter one fourth. He has no neuralgic pains. Sensation to touch is much blunted, while that to pain is everywhere preserved. As to the eyes, slight drooping of the right upper eyelid, three degrees of insufficiency of the interni, floating opacities of the vit-

reous, gray optic disks, epithelial choroiditis, and normal pupil reactions are found. He sways a trifle when his eyes are closed. There is marked ataxia, and loss of muscular sense in the upper extremities. The elbow jerk is lost on both sides, the knee jerk exaggerated. Sexual power is lost, but there is no trouble with bladder or rectum. The case is unique in the author's experience.—*Med. News*, April 21, 1888.

Sulphonal: A New Hypnotic.—This substance is "diethylsulphondimethylmethan," an oxidation product of the union of ethyl-mercaptan with acetone, and has, therefore, the composition represented by the formula $(Ch_3)_2=C=(C_2H_5So_2)_2$. We owe its discovery to Professor E. Baumann, of Freiburg, and its therapeutical application, or, rather, some knowledge of its remarkable physiological properties, to Professor A. Kast, of Freiburg, who has a long article on the subject in the current issue of the *Berliner klinische Wochenschrift* (April 16, 1888), in which he has nothing but praise for this new addition to the materia medica. The term "sulphonal" is due to a happy suggestion of Herren Fr. Bayer and Co., Elberfeld, who supply it. This substance crystallizes in large colorless tables, and is perfectly devoid of taste and smell. It dissolves in 18 or 20 parts of boiling water, in 100 parts of water at the ordinary temperature, and is easily soluble in alcohol or alcoholic ether. It is not affected by acids or alkallies, or by oxidizing agents either in the cold or warm. Thus, concentrated sulphuric acid with heat scarcely affects it, and it resists fuming nitric acid, and even chlorine and bromine; it is, therefore, a very stable body. Twenty experiments with sulphonal on healthy men showed that doses of three or four grammes were borne by adults without the least discomfort or disagreeable after-effect. Thus, a medical man, aged twenty-eight, took 3 grammes (46 grains) at 4 P.M., and at 5.15 P.M. began to feel sleepy, with a feeling of heaviness in the head. At 6.15 these feelings lessened, but at 8.15 they increased somewhat. At 9.15 the subject of experiment went out for the evening, having resisted the inclination to sleep. He passed a tranquil night afterward, and felt no after-effects of any kind. Another medical colleague sank into a sound sleep two hours after the same dose, the sleep lasting several hours. The time of day and the meals were found to influence the action of sulphonal very much.

Employed medically the drug has been given to 60 patients, and 300 observations of its effects were made (Professor Cramer gave it 200 times in the Marburg Lunatic Asylum). The results, almost without exception, were that the patients sank within from half an hour to two hours into a tranquil and sound sleep, lasting from five to eight hours, and awoke feeling perfectly comfortable. A few felt tired and sleepy next day. The digestion, pulse, and temperature were unaffected, and it is curious that no ataxy of any degree or kind was present, whereas this was the most prominent symptom in dogs after large doses. The ordinary dose for man is two grammes (half a drachm). Professor Kries has examined the effect of sulphonal on the blood-pressure, and has established the fact that in dogs, even after very large doses, the blood-pressure is not lowered. Poisonous doses in dogs, to determine the mode of death, caused several convulsions, then, after a few hours, a heavy sleep, deepening to coma and ending in death in about ten hours. Spectroscopic and microscopic examination of the blood revealed no alteration of its elements. Sulphonal appeared most efficacious in cases of sleeplessness in nervous subjects, but was given with benefit in all kinds of cases, including even cardiac valvular disease.—*Br. Med. Jour.*, April 21, 1888.

Zaleski (S. S.) on the Unsuitability of Silver Tubes for Tracheotomy.—Four or five years ago, while I was working in the Chemical Institute of the University of Dorpat, the assistant in the surgical clinic came to the director of the institute with the remains of a silver tracheotomy tube, which, if I remember rightly, had been left in for about two years without having been withdrawn or cleansed. Of the tube there only remained, owing to the solvent action of the contents of the air-passages, the merest shell, in appearance like a kind of coarse cobweb. Thin, rough, uneven, sharp-edged portions were connected by silver threads, and it was surprising that the whole had hung together as well as it had done, and that a tube so nearly destroyed had not given way and caused the patient to die from asphyxia or from injury of the air-passages. The silver had been dissolved by the secretions of the bronchi and trachea, and had

the tube been allowed to remain much longer, there can be but little doubt that no part of it would have been left.

I can only explain the chemical process by which the metal was dissolved, by the continual action of the chloride which exists in almost all the secretions of the body, and which is at times abundantly present in the mucous glands, upon the metallic silver, which thus becomes converted into chloride of silver; this in its turn, although a very stable substance, being acted upon and dissolved by the alkaline secretions, which contain ammonia and cyanides, in the same way as the sulphocyanide of potassium of the saliva has the power of dissolving chloride of silver. This dissolved silver is partly expectorated, but part probably is absorbed. It may be that it goes to form organic compounds, or these may be reached by indirect means.

I do not know whether this case, so interesting and important both from a chemico-physiological and from a practical point of view, was ever published. If not, it may perhaps be desirable to obtain as detailed an account of it as is now possible.

I am not aware whether the patient suffered from argyria, but as soon as possible afterwards I performed tracheotomy on a cat, and inserted a silver biliary fistula tube, which I allowed to remain until the animal died a month later. By carefully weighing the tube before and after the operation, I found that it had sustained a very appreciable loss, the original weight, which was 1.9892 gramme, having been reduced by 0.0056 gramme, so that it had lost 0.282 per cent. of its total weight. It is thus quite evident that not only silver pessaries in the vagina or silver tubes in biliary or gastric fistulæ, but silver tracheotomy tubes in the trachea, can be dissolved, the metallic silver being taken up by the fluids of the body.

Two questions present themselves: (1) To what extent is such a gradual wearing away of silver detrimental to the organism? and (2) What substance can best be substituted for silver in the construction of tracheotomy tubes? As regards the first question, we know that the long-continued and constant internal, and even sometimes external, use of silver preparations in very small doses ultimately produces argyria, which, as both clinical experience and experiments on animals teaches us, is a very serious and incurable disease. In the well-known case published by Orfila[1] (who first described argyria), the use of nitrate of silver for eighteen months was followed, not by argyria merely, but by death. In the case described by Fromman[2] the gray discoloration of the skin occurred after ten months' treatment, during which period the patient had taken altogether 104.51 grammes of the nitrate, equivalent to 66.39 grammes of metallic silver. Riemer also published a case[3] in which the patient became affected after thirteen months' treatment. During this period he had taken 2,900 pills containing 17.40 grammes of the nitrate, or 11.61 grammes of metallic silver; death following after the consumption of 5,672 pills, which contained 34.032 grammes of nitrate, or 21.81 grammes of metallic silver. Finally Dittrich published a case[4] in which toxic symptoms came on after six months' treatment of a tabetic patient, after he had taken 1.83 grammes of the nitrate (10 milligrammes daily), or 1.16 grammes of metallic silver, the patient succumbing at the end of two years of this treatment after having taken 7.22 grammes of the nitrate—equivalent to 4.69 grammes of metallic silver.

It will thus be seen that the manifestation of the deposition of silver in the tissue by the occurrence of a gray discoloration of the skin takes some time, but the actual deposition of the metal in the liver, bone, medulla, kidneys, and spleen commences very much sooner, producing what has been called *latent argyria*, during which there is no discoloration, though the health is affected, as experiments on animals show.

When it is considered that a silver tracheotomy tube weighs from 10 to 16 grammes, and that, if only half of it is dissolved, from 5 to 8 grammes are absorbed into the tissues, we must admit that all the conditions are present for the production of argyria. Of course, a certain part is expectorated, but by far the larger part is absorbed, at all events, as soon as the mucous membrane of the air passages has become inflamed. If we do not look upon argyria in the light in which it is considered by Charcot, but as a grave and dangerous

[1] "Traité de Toxicologie," pp. 21, 22. Paris, 1843.
[2] C. Froman: Ein Fall von Argyria mit Silberabscheidungen im Darm, Leber, Nieren, und Milz. *Virch. Arch.* Bd. xvii., pp. 135, 147. 1859.
[3] *Arch. f. Heilk.*, Leipzig, 1875, xvi. and xvii.
[4] *Prager med. Woch.*, Bd. ix., 46, 47.

affection, as it is considered by the majority of physicians, and as a series of experiments on animals in the Pharmacological Institute here has shown it to be, the conclusion which is forced upon us is that the use of such a comparatively easily soluble metal as silver for the construction of tracheotomy tubes is fraught with danger to life. Again, the danger of an irritant action of the dissolved silver on so delicate a tissue as the mucous membrane of the air passages setting up a catarrhal condition should not be lost sight of.

There is also another circumstance which must be taken into account in estimating the sources of danger. If the patient or his attendants are so negligent that the tube is not cleaned and examined as to its perfect condition, the destructive action will go on until a time comes when, as in the case related above, it will have become thin, and only threads and films of metal remain—a condition which renders the patient's life most precarious, as there is always grave danger of his becoming choked or injured by fragments broken off. That there is a possibility of this happening cannot be doubted after the case I have mentioned.

Regarding the second question—of what material the tube should be constructed in order that it may remain for a long time in the trachea without danger—I think that for patients in good circumstances the most suitable materials are gold, platinum, or rock crystal. For those in the humbler classes, porcelain, glass, or even ivory might be used. These substances are, it is true, to some extent acted upon by the fluids of the body, the silica of glass being even soluble in traces in distilled water, but not in any appreciable quantity; besides which silica is one of the substances which is contained in the body, especially in the case of vegetable eaters, and is not hurtful to it Gold and platinum may doubtless, after a long time, be to some extent dissolved, especially by the sulphuretted hydrogen which, if the disinfection is not perfect, is sure to exist.—*Lancet*, April 28, 1888.

Phillips on Pneumonia in Children.—As regards fever in the pneumonia of children, it is surprising how well they withstand it, many of them bearing a temperature of 104° for days without marked inconvenience. As a rule it is better to leave the fever alone; but if it is thought necessary to reduce it, give full doses of quinine. Do not use antipyrine or acetanilide, as they are too dangerous remedies to give to children suffering from pneumonia.[1] Salicylate of sodium may be used if it is preferred, one grain for each year of the child's age being given every two hours. I, however, use quinine by the rectum in doses of from four to ten grains. Generally two doses during the twenty-four hours are sufficient, the last dose being given about midnight; but it may be given oftener if necessary. It usually takes four hours before its effects on the temperature are manifest, and in some cases no effect is produced until two or three doses have been given, after which two doses a day will be found sufficient. The following abstract will show its action:

L. L., aged thirty months, suffering from pneumonia. Temperature reached 104.5° (axillary) at 1 P.M., December 20th, when a suppository of six grains of quinine was given. At 3 P.M. temperature 105°; 5 P.M., 103°; 8 P.M., 101.5°; 11 P.M., 102.7°. Suppository given, 1 A.M., December 21st, 103°; 7.15 A.M., 100.5°; 1.30 P.M., 102.5°. Suppository given, 3.40 P.M., 100.5°; 6.30 P.M., 100°; 8.30 P.M., 100.5°; 7 A.M., December 22d, 101.5°; 10 A.M., 102°; 12 M., 103°. Suppository given, 2.20 P.M., 102.5°; 4.30 P.M., 100.5°; 8.30 P.M., 98°. The temperature after this did not need any further treatment, the disease terminating December 24th.

I cannot close without referring to the value of camphor in relieving the nervous condition and rapid respiration, and to the value of the steam bath[2] in cyanotic conditions and when the right heart is greatly engorged. I believe that to a certain extent it takes the place of bloodletting in the adult in the same condition; and although it may be thought to be taking a step backward to recommend it, I know of no treatment in the adult, when the respirations are hurried and panting, the face almost black, and the right heart engorged with blood, that gives greater relief than the abstraction of a few ounces of blood from the arm, followed by the administration of digitalis and stimulants.—*N. Y. Med. Jour.*, April 21, 1888.

[1] See note by Porter, p. 226.

[2] I use a kettle of boiling water on the stove and a rubber pipe running from its nozzle under the bedclothes, so that the child's body is enveloped in steam.

PATHOLOGY.

Acromegaly. — The oddly-sounding name "acromegaly," for which we are indebted to Marie, designates a morbid process the nature of which is ill understood, but which is evidently something widely different from myxœdema and osteitis deformans. Mr. R. J. Godlee, Dr. H. Hadden, Mr. Ballance, and Dr. Wilks have reported cases. The leading feature of the affection is an hypertrophy of tissue of more or less definite distribution—a sort of "sprouting" of the hands, feet, and face. Around this central characteristic many outlying and somewhat isolated symptoms abound; but the relationship which the various phenomena bear to one another is at present a mystery. We propose to examine a little in detail the nature of the overgrowth, and the kind of subordinate symptoms.

The hypertrophy involves the hard and soft tissues of the hands, feet, and face, but perhaps in most cases the overgrowth is greater in the bones. In singular contrast to the enormous enlargement of these peripheral parts, the forearms, arms, and legs preserve their normal size, or only increase in bulk to a slight extent, as in cases described by Friedreich. The lower part of the face undergoes most enlargement, so that the outline of the face has an ovoid shape, with the widest part downwards, and the greatest vertical diameter considerably elongated. In osteitis deformans the bony overgrowth of the skull is generally most evident in the temples and forehead, thus reversing the shape of the facial contour of acromegaly. Of the nature of the hyperplasia of the soft tissues and bones we require further knowledge; but so far it appears that the increase in the number of histological elements is not accompanied by marked perversion of the nutrition. In Mr. Godlee's case the skin is described as coarse, and the sebaceous glands of the face enlarged. The fatty tissues of the hand appear to be overgrown, but nothing in the nature of an excess of mucus is mentioned in this structure.

In addition to the most important enlargements, there are other deformities of such constant association as to merit decided attention in any attempt to grasp the true nature of acromegaly: the curving forwards of the spinal column; the increase in the size of the clavicles, ribs, patellæ, and iliac bones, with the remarkable exemption of the long bones from the hypertrophy; the tendency to augmentation of the fibro-cartilages of the ear, nose, and larynx; slight deformity of the joints; wasting of muscles; deafness and blindness; macroglossia; preservation of general sensibility; spontaneous pains; a proclivity to varicose veins and hemorrhoids; polydypsia, polyuria, and a cachexia of indefinite character. The skin, as a rule, is described as absolutely unchanged, but we have already referred to Mr. Godlee's case to show that at times this may take on characters suggestive of interference with its nutrition. Nevertheless, in that case, as in all the reported instances, the thyroid body was much diseased. In Dr. Hadden's and Mr. Ballance's case the thyroid was atrophied, and yet the definite signs of myxœdema, as in all the reported cases of acromegaly, were wanting. The circumscribed blushes of the cheeks were absent in Dr. Hadden's case, but is there not a tendency to over-estimate the importance of this flushing of the face in myxœdema? Acromegaly affects both males and females between the ages of fifteen and sixty. Disappearance of the menses seems to be a fairly constant symptom, but may have no etiological significance when we reflect how frequently other diseases are accompanied by amenorrhœa. The disturbed menstruation, generally of menorrhagic sort, is a feature of the previous history of marked cases of myxœdema. The absence of pallor or translucency in acromegaly contrasts somewhat with myxœdema, but in both maladies fulness of the eyelids and their neighborhood may be observed. Slowness of movement or speech is a symptom of myxœdema and paralysis agitans, but does not seem to obtain in acromegaly. The long bones suffer in osteitis deformans, but not in acromegaly. Blindness has been observed in a certain number of cases, and this has been attributed, probably with accuracy, to the overgrowth of the pituitary body exerting pressure on the optic chiasm and tracts. The loss of vision in several cases was attributed to opacity of the cornea.

Whilst recognizing the great differences between esteitis deformans, leontiasis ossea of Virchow, myxœdema, and acromegaly, it is impossible not to be struck with some similarities or points of contact between these so variously named affections. —*Lancet*, April 28, 1888.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital.

VOL. V., NO. 20. May 17, 1888. WHOLE NO. 68.

CONTENTS.

	PAGE
Surgery	233
Diseases of Women	240
Miscellaneous	243
Book Notices	244

SURGERY.

Porter (C. B.) on Fracture of the Sternum, with Dislocation of Fragments; Restoration to Place by Treatment by Position; Recovery.—Fracture of the sternum alone is an extremely rare accident, but as a complication in crushing injuries of the thorax it is associated with fracture of the spine or ribs. At St. George's Hospital, in four years nine cases were examined, three associated with fracture of the spine, and six with fractured ribs. Malgaigne recorded but ten cases, five of which ended fatally on account of complications as mentioned above. The causes are usually direct violence, as crushing blows upon the chest, though violent bending of the spine backwards has produced it. "One case (Chevance's) was caused by violent forward flexing of the body by a fall."

Dr. Fagal, of Mexico, reports this accident as having happened to a celebrated vaulter, who whilst bending his body backward, was endeavoring to lift a heavy weight with his teeth. The complications are injury and inflammation of the pericardium, pleura, lungs, mediastinum, and heart.

Authorities differ as to treatment advised. Some recommend the recumbent position, with a pad between the scapulæ, and head low. Others the sitting posture, with the head thrown back. Others operative measures, as the lifting of the depressed fragments by means of the trephine and elevator, or the corkscrew; while another says that these latter methods are "the relics of the old, cruel, and barbarous surgery." It seems to me that after position and manipulation have failed, and deep inflammation threatens, that some operative interference is indicated, and especially if the displaced fragment is pressing upon the trachea or the large vessels.

The case I have to report is that of Captain Holden, aged twenty-one, captain of the Harvard football eleven, who stood erect ready to tackle one of the opposing team, who was running with the ball. As his opponent reached him he jumped, and his knee struck Holden on the sternum, producing a fracture and dislocation of the upper fragment backwards, the lower one overriding. The point of fracture was at the junction of the second and third pieces of the gladiolus. The ossification at this point is completed between the twentieth and twenty-fifth years of age, so that the separation was of the nature of an epiphysial fracture. There was profound shock and agonizing pain. The depression seemed to be little more than the thickness of the sternum. He was removed to the Massachusetts General Hospital, and in consultation with the other members of the staff it was decided to try the effect of the recumbent position, with hard pad between the shoulder-blades, and the head lower than the chest. This position was most painful, and after some hours the pad was removed.

On the next day there was no change in the position, and the patient suffered greatly from pain in the bowels, which did not yield to cathartics or enemata. He had retention, requiring the catheter. Morphine was given subcutaneously.

On the third day no change. The patient was lifted from the bed to the erect position, and, supported under either arm,

was bent backwards as far as possible. This produced a sickening pain at seat of injury, and he feared he would faint, and he was put back to bed. About half an hour afterwards, on coughing and taking a deep respiration, the bone suddenly snapped forward into place. A broad band plaster was immediately applied (such as is used in the fracture of the ribs) to hold the chest walls immovable, and compel diaphragmatic respiration. The plaster was changed from time to time, and there was no re-displacement. There was slight cough for ten days. Eleven days after injury he was up, and in three weeks left the hospital. There was no resulting deformity.—*Boston Med. and Surg. Jour.*, April 12, 1888.

Lyman (C. B.) on Dislocation of the Bones of the Sternum.—The patient, a passenger brakeman on the Union Pacific Railroad, was twenty-seven years old. On January 22d, while running up an embankment to catch a train, and nearly at the top, he fell, and struck with his chest upon the end of a projecting tie. He suffered a good deal of pain during the day, and with every breath or movement of the body he felt something snap at the seat of pain.

I first saw him on January 25th, three days after the accident; the pain had diminished, but he could still feel the snapping. Upon examination I found a depression of nearly half an inch just below the line of the second ribs and in the median line; with forced inspiration there was a distinct cartilaginous grating. In fact, I had to do with a backward dislocation of the gladiolus upon the manubrium, the second rib on each side remaining attached to the manubrium.

Reduction was attempted by manipulation of the fragments, and also by standing behind the patient and drawing the shoulders back forcibly, while the patient was made to take a deep inspiration. This, however, failed. The patient was then taken to the Union Pacific Hospital and etherized; the dislocation was then reduced by Dr. O. J. Pfeiffer and myself by depressing the upper fragment firmly, while pressure was being exerted on the chest in the axillary line on either side, over the ribs which were attached to the lower fragment, the object being to spring the lower fragment forward at the same moment that the upper fragment was most depressed.

This failed several times; but finally the patient most opportunely gave a slight cough, owing to fresh ether on the sponge, just at the moment when pressure was being exerted as described, and the lower fragment came forward into line with a distinct crepitus. An adhesive strip was then placed around the chest to hold the fragments immobile for a few days. There has been no tendency to re-dislocation, and the fragments remain in perfect line. This case is of interest for several reasons:

(1) On account of the infrequency of the accident. Poland, in "Holmes' System," says that during the last *thirty years* "several cases" have been seen at Guy's Hospital.

(2) Its method of production. Most of the cases reported have been produced by indirect violence; this was produced by direct violence, the end of the tie striking the sternum just below the line between the manubrium and the gladiolus.

(3) Because the lower fragment was displaced backwards. In almost every case on record the upper fragment has been displaced backward, instead of the lower one.—*Boston Med. and Surg. Jour.*, April 12, 1888.

In commenting editorially upon these cases the *Boston Med. and Surg. Jour.* says:

"Reduction by coughing has also occurred in a case reported by Dubroca, as seen by him in the service of M. Polaillon. Whether a cough instituted for the sake of effecting such a restoration would prove equally effectual in future cases can be determined only by actual trial when cases present themselves, but it will doubtless occur to every one who reads these two accounts that a procedure which may prove a very valuable adjuvant in these cases has been neglected.

"The force exerted from within outward by a cough is in common use in the examination of herniæ, and is, in reality, well understood. That the force is a great one is readily seen when we consider that it sometimes is sufficient to break ribs. Dr. Gillette gives, in the *Union Médicale* of June 27, 1876, a case of a man of fifty-six, emaciated to the last degree by pulmonary tuberculosis, who sustained a fracture of the eleventh rib of the left side during a severe fit of coughing. The *Medical Times and Gazette* of November 3, 1860, quotes the case of a patient of M. Piffard who

fractured a rib during a paroxysm of cough, "the result of a cold," though the patient was robust, and, save for the cold, in perfect health. The cough certainly deserves a trial in future cases of fracture or dislocation of the sternum before such cases are abandoned to nature, or the more radical operative means are resorted to."

Frick (A. P.) on a Gun-Shot Wound of the Liver Complicated with Compound Comminuted Fractures of the Seventh, Eighth, and Ninth Ribs on the Right Side; Operation; Recovery.—A stock-raiser, aged 57, was admitted into the Camp Hospital on March 15, 1887.

On March 12th, he had been on his range, alone, looking after some cattle. When at lunch, about 2 o'clock P. M., he tried to drink from a brook without using a cup, and while stooping for this purpose, his 44-calibre revolver fell from his pocket, the hammer striking a rock and discharging a load into the right side of his body.

The wound is accurately described as follows: Wound of entrance 5½ inches outwardly from the anterior median line of the body, and about midway between the axilla and the anterior superior spinous process of the right ilium.

The exact measurements (the patient lying flat on his back), are as follows, viz.: Right axilla to wound of entrance, 9 inches; anterior superior spinous process of right ilium to wound of entrance, 8½ inches. Right axilla to wound of exit, 10 inches; anterior superior spinous process of right ilium to wound of exit, 8 inches; the wound of exit being about 1 inch lower than the wound of entrance, and the length of the track of the ball 6 inches antero-posteriorly. Distance from wound of exit to posterior median line of the body, 5½ inches.

The measurement around the body at the seat of injury was 34 inches.

Those portions of the seventh, eighth, and ninth ribs lying in the track of the ball were all comminuted.

Immediately following the reception of the injury there was profuse hemorrhage, which did not entirely cease until more than twelve hours afterwards. He was unable to mount his horse or walk, and his friends did not find him until twenty-five hours after the accident.

Believing that the wound would necessarily prove fatal in a short time, his friends cared for him near the place where the accident occurred; but on March 14th, twenty-four hours after finding the wounded man, it was decided to seek professional aid, and the patient was on that day brought in a wagon as far as old Camp Goodwin, seven miles from Fort Thomas, where I was then stationed, and placed in my care on the following day, March 15th.

His temperature, on admission, was 99⅘°. Rest, quinine in tonic doses, and extra diet were prescribed.

On the 16th the temperature rose to 101⅘°, and to 102⅘° on the 17th. I now recommended a surgical operation, and on March 18th, after consultation, and with the efficient assistance of Drs. E. R. Morris and T. B. Davis, U. S. A., excised parts of the fractured ribs.

At 2 o'clock P.M., the patient was brought to the operating room, and in fifteen minutes came fully under the influence of the ether which was administered. With the usual antiseptic precautions the parts lying between the wounds of entrance and of exit were divided on a grooved director, from the track of the ball outwards. Upper and lower flaps were dissected back far enough to reach sound portions of the injured ribs. After removing the loose fragments of bone, the shattered ends of the seventh, eighth, and ninth ribs were cautiously cut and rounded with bone-nippers, guided on the inner side of the ribs by the index finger of my left hand.

Only one vessel, the eighth intercostal artery, required a ligature.

The lengths of the excised portions of ribs were about two and one half inches, thus bringing into view the right lobe of the liver over a space of two and one half by six inches, and showing a long lacerated wound of that organ, with an abscess one and one half inches in depth situated about the middle of the exposed portion. The abscess discharged pus mingled with bile.

After removing all lacerated parts that must necessarily slough, the entire wound and cavity of the abscess were thoroughly syringed and cleansed with a solution of bichloride of mercury (1 part to 1000). A drainage-tube was now inserted into the cavity in the liver, another laid across the wound from the point of entrance to that of exit of the bullet, and the parts brought together by means of the interrupted suture.

The duration of the operation was thirty-five minutes.

The patient was then returned to his bed, a draw-sheet placed under him, the surface sponged frequently with the bichloride solution, and lint wet with lead and opium lotion kept constantly applied. The lotion was kept as cool as possible without having ice, and the cloths changed every few minutes for the first two or three days.

Magendie's solution of morphine (ten minims) was administered hypodermically, as soon as the effects of the ether had passed away, and afterwards quinine, five grains, with one grain of opium, were given three times daily. In addition to this about six ounces of brandy in the form of egg-nog were given every twenty-four hours.

Twice each day the drainage-tubes were cleansed; and the parts thoroughly syringed through them with bichloride solution.

Mild, cooling laxatives and rectal injections were given as needed. Later on, ammonii carbonas was added to the stimulants. Milk, beef-essence, etc., were liberally given, and the same general treatment as above noted was pursued until all danger from peritonitis and septicæmia had passed.

The temperature in this case the day *before* the operation was 102⅘°, which (with the exception of the tenth day *after* operation, when a temperature of 103⅘° was noted was the highest reached throughout the case.

Through the central drainage-tube there was a free discharge of bile during the first ten days.

Troublesome bed-sores and slight necrosis of the proximal end of the ninth rib, requiring operation, were the only complications of any note that were encountered.

On June 1, 1887, the patient was discharged, cure complete, and in every way satisfactory.—*Med. Times*, May 1, 1888.

Gupta (K. P.) Nature's Operation of Amussat, or Congenital Opening of the Colon in the Left Lumbar Region.—Derastullo, a male child, aged three years and nine months, of healthy Mohammedan parents. The father is somewhat of a nervous temperament. The mother has two daughters without any deformity. She was in labor pains for four days before the child was born. The left lower extremity is deformed, the legs being flexed on the thigh, to which it is attached by a sort of fleshy membrane half-way up—*i. e.*, the upper half of the leg and the lower half of the thigh. The thigh is plump and well nourished, but the leg, especially the lower half and foot, is atrophied. The foot is further deformed by being turned and pointing backwards. The spine is straight from the cervical to the lumbar region, and there it is curved to the right, pushing the sacrum to the right side. At the level of the third lumbar vertebra, and just above the left nates and about two inches below the last false rib, is a triangular sore. The shape is irregular, being a triangle with a broad apex, or truncated, or more strictly speaking, a trapezium. It looks red, but is perfectly dry and free from all discharges, either serous, sanguineous, or purulent. Near the left basic angle is a puckered muscular ring, standing in bold relief of two or three inches above the surface, which acts as the anus, through which the fæces are discharged, the child lying on its left side. The parents assured me that the child had no inconvenience or pain in defecation. The child being timid and afraid of my looking at his deformity, I could not examine more closely by the finger or instruments. The pubes in front has no genitals, which are transposed to the perineum, where the natural anus would have been. The penis is ill-developed, consisting of a glans with a small corpus spongiosum. The testicles are on either side. The child passes urine without any difficulty.

The deformity was noticed while I was inspecting some vaccine operations in a village some fifty miles east of Calcutta. The case is, I believe, unique—being a sort of nature's operation of Amussat, or a congenital opening of the colon in the left lumbar region, as originally proposed and recommended by Callisen, and afterwards carried out by Amussat. Nature here, as it were, confirms the wisdom of Callisen's great idea, that the best place for opening the colon and making an artificial anus is in the left lumbar region, and from behind where the peritoneum is deficient.—*Lancet*, April 21, 1888.

Arnold (C. H.) on Fracture of the Zygomatic Process of the Temporal Bone.—Tokara T——, aged twenty-two, was sent to the Government Hospital on July 9th, with an injury to the face caused by a violent blow from the heavy iron hook at the end of the chain attached to the steam crane used in discharging and taking in cargo.

On admission the patient presented a

swelling about the size of a pigeon's egg, two fingers' breadth in front of the left ear. There was also an odd expression on that side of the face if viewed in profile, but not sufficient to amount to a deformity. The patient could open and close the jaws and speak distinctly, but the motion from side to side, and also the act of swallowing, were very painful. On close examination and manipulation, a distinct fracture of the zygoma was perceptible between the coronoid and condyle of the inferior maxillary bone. The replacement of the broken fragments was most difficult, but by inserting one forefinger inside the cheek and pressing with the other hand outside, above the zygoma, the broken ends were at length brought into perfect apposition. Further treatment consisted in the application of a four-tailed bandage, two ends being tied above the head and two behind the neck. Only liquid food was given.—*Lancet*, April 21, 1888.

Absence of Clavicles.—Dr. Todd reports that in the dissecting-room he had found a subject without clavicles. Rudiments of the clavicle were attached to the acromion process and the sternum; but the intermediate part was entirely gone. There was nothing but a fibrous cord to represent the clavicle. In the literature of the subject which he had been able to consult he had been unable to find any cases of the kind reported. Gegenbauer was the only one of several writers on anatomy who refers to such cases.—*St. Louis Cour. of Med.*, April, 1888.

Roberts (J. B.) on the Loofah, a Vegetable Skin-Scrub for Aseptic Operations.—The necessity of scrubbing the integument thoroughly with soap and water, in order to remove dirt and secretion before operating aseptically upon the part, has recently compelled the provident surgeon to carry with him to operations a bristle brush, such as is used for cleaning hands and finger-nails. I have recently saved myself the expense of supplying brushes for emergency operations, and avoided the inconvenience of carrying away from the patients' houses such wetted brushes, by using portions of the peeled and macerated fruit of the loofah or towel-gourd (*Luffa Ægyptica*). A few of these segments are carried in my operating-case at all times, and when once used are thrown away. According to the London *Chemist and Druggist*, this gourd is grown extensively in the West Indies, as well as in Africa and Arabia; but I am told it can be cultivated in Philadelphia gardens. It is a cucurbitaceous plant, with fleshy fruit which resembles in shape and size the Indian clubs used for calisthenic exercises. When the epidermis, mucilaginous pulp, and seeds are removed from this fruit, there remains the fibrous network or skeleton, which, when dried, acts so well as a scrubbing-brush for the skin. This dried skeleton when wet is harder than a sponge, though perhaps rather softer than a bristle brush, and acts exceedingly well as a skin-scrub for obtaining an aseptic condition of the skin. I have been able to get with it sufficient friction not only thoroughly to cleanse the skin, but also to produce in a few moments an erethema. This could hardly be accomplished by so soft an article as a sponge, which is, on account of its softness, unsuited for a surgical cleanser.

The prepared skeleton, or loofah, as it is called commercially, is cut, transversely to its long axis, into pieces about two inches long, which, if desired, may afterwards be split longitudinally. For my own use, I prefer the unsplit segment, which seems to have a rather rougher and harder surface, and better removes the dirt and secretions from the crevices of the skin. As the entire loofah can be bought for a few cents, these segments—of which from five to ten can be made from each—cost not more than two cents apiece; to throw them away after using is therefore no great extravagance.

It will be understood, I trust, that this material is available for scrubbing the skin of the patient, but it is not suitable for cleansing the spaces under the surgeon's nails; for that purpose I always carry a toilet nail-brush. My advocacy of the loofah is for cleansing the skin of patients at whose houses a brush for cutaneous purification is often not readily obtainable, though a new and clean scrubbing brush, such as is used for floors, would be perfectly satisfactory.—*Cincin. Lancet-Clinic*, April 28, 1888.

Rafin on Massage in the Treatment of Juxta-Articular Fractures.—The principles underlying this method of treatment are several. In the first place immobilization of the joint is maintained for the shortest possible period to lessen the probability of rigidity. Manipulation of the joint, the fracture, and the member

promotes consolidation, hastens the absorption of extravasated blood, which by pressure tends to prevent the formation of callus, and causes atrophy of muscles. It is especially in fractures without displacement that this method succeeds. Concomitant lesions of the skin are contra-indications to this treatment.—*Lyon Med.*, April 15, 1888.

Taylor (J. W.) on the Treatment of Perforation Due to Gastric Ulcer.—In the Birmingham *Medical Review* for April, 1886, the author details a case in which he performed abdominal section for a peritonitis following perforation of a gastric ulcer. The patient progressed well for a time, but then developed pyo-pneumothorax, probably from rupture of an abscess, connected with the ulcer, into the pleura. This condition too was relieved by operation, and the patient became convalescent, to die after two days' illness from acute obstruction of the bowels, which was found on autopsy to be due to a constriction of the ileum, produced by bands of old peritoneal adhesions.

From a study of this case and thirty-one others contained in two synoptical tables the author draws the following conclusions:

First: As soon as the peritonitis of perforation is declared, the abdomen should be opened and the peritoneum thoroughly washed out and made clean. The washing out is in my opinion the essential part of the operation, and the method of doing this is of importance.

By syphon or douche a continuous stream of warm water is obtained. The rubber tubing of the syphon or douche terminates in a tube of glass or metal, closed at its extremity, but possessing two large lateral perforations, the edges of which are perfectly smooth. By its means a double current of warm water is carried to every part of the abdomen and pelvis in succession. The intestines are gently shaken in the water-stream and the washing is continued until the returning fluid is perfectly clear. An ordinary pitcher full of warm water contains the amount usually necessary for the washing out; sometimes more may be required.

Beyond this, in the first instance, it will not be wise to go except in very unusual cases, and this for two reasons. (1) The collapse is usually so marked and profound that a prolonged operation is directly contra-indicated; and (2) the perforation, as we have seen, being usually about the posterior wall or lesser curvature, could often be directly dealt with only after opening the stomach. There is no external sign, not even the aspect of the perforation, if this be visible, which is any guide to the exact situation or extent of the ulcer as regards the mucous membrane, and a possible incision through the floor of a deeply excavated ulcer would be a bad commencement for the operative repair of a perforation. In the present instance, any manipulation outside the stomach must have inevitably disturbed the beneficent relations of the liver and perhaps of the pancreas, while any attempt at treatment from within the stomach would have been worse or no less distinctly harmful, considering the loss of tissue and the structures which formed the floor of the ulceration. But in a limited number of cases the perforation may be in a part of the anterior wall untouched by the left lobe of the liver and unprotected by adhesions. In these cases particles of semi-digested food or fluid, evidently from the stomach, will be more likely to be met with on opening the peritoneum, and the treatment should be different. I think there can be no doubt that in such cases (which however will be rare) the perforation should be found, if possible, and accurately closed by Lembert sutures when the section is made for the peritonitis.

Secondly: The alimentation subsequent to the laparotomy for peritonitis should be rigidly rectal or extra-gastric for a prolonged period, probably for three weeks if possible.

Thirdly.—If after successful laparotomy for peritonitis due to perforation, abdominal pain on the left side, a hectic temperature, cough, and rapid breathing should arise, with delayed manifestation of any adequate cause for this condition, the existence of a sub-diaphragmatic abscess may be probably suspected. The case should be diligently watched for the first physical signs of its locality, and as early as possible the abscess should be opened, as this may sometimes be done with a high probability of complete success.

One subsidiary question remains—Where should the incision be made in the primary laparotomy? I think in the usual situation between the umbilicus and the pubes. Until diagnosis has reached a perfection at

present altogether beyond us, it is important in every case of acute peritonitis occurring in a woman, if the abdomen be opened, that the pelvic organs should be capable of satisfactory examination. Furthermore, all fluids tend to collect in the lower part of the abdomen and pelvis, and I am strongly of opinion, if the case be managed wisely afterwards, that it is much more important to thoroughly clean out the peritoneal cavity and pelvis than to accurately sew up the point of perforation. This opinion rests on a somewhat extensive experience of abdominal work in which not a few analogous cases have occurred tending to confirm the correctness of the advice here given.

Elkin on Separation of the Deltoid from its Insertion.—The author reports a case of subglenoid dislocation of the head of the left humerus, in which the deltoid muscle had been torn from its insertion on the shaft of the humerus. The patient was a man sixty-five years of age, who, on the 1st of October, was knocked down while engaged in a fight, falling upon his hands and sustaining the above injury. The dislocation was easily reduced, and the limb, by means of a roller bandage, was fixed firmly to the side of the chest, the forearm being suspended in an ordinary handkerchief sling. At the expiration of two weeks the bandage was removed, and the patient instructed to use the arm gently until complete motion was restored. On removing the dressing he noticed at the insertion of the deltoid an indurated swelling about the size of a pigeon's egg, which was more or less discolored, and elicited considerable pain when pressed upon or when the patient made an effort to raise the arm from the body, thereby bringing into play the action of this muscle.

Although the doctor could readily move the arm in any direction without pain to the man, yet the patient was unable to bring the injured limb from the body, and each attempt to do so was attended with much pain at the indurated spot. All the other muscles of the arm and shoulder acted perfectly, and seemed to have sustained no injury. Local applications in the form of liniments were rubbed over the joint and injured spot two or three times a day for some time, but with no apparent benefit.

At the expiration of two months the action of the deltoid was unimproved, and there was still pain at its insertion when the patient endeavored to raise the arm.

On account of the disuse of the arm all the muscles became more or less atrophied, the shoulder lost its rotundity, and the head of the humerus became quite prominent. On December 1st the doctor began the use of electricity. The galvanic current was applied to the injured limb three times a week for one month without any good result.

After this all treatment was abandoned, and the patient advised to use the arm gently as much as possible, and report the result. The case was seen three weeks afterwards, when the patient was able to raise the arm without pain almost at a right angle to the body, and the induration had almost disappeared.—*Atlanta Med. and Surg. Jour.*, April, 1888.

Wounds of the Intestine.—At the Société de Chirurgie, M. Berger said at the recent Surgical Congress the possibility of a wound of the intestine being plugged by the mucous coat was denied, but he would bring forward a striking example of the fact. A woman who had received several stabs in the umbilical region was brought to the hospital three or four hours subsequently in a state of profound syncope, and placed under his care. The abdomen was greatly distended, and the exsanguine aspect of the patient led him to suppose the existence of abundant intra-abdominal hemorrhage. He opened the abdomen and gave exit to a flood of black blood. When search was made for a wounded intestine, a coil was discovered which had been transfixed by the knife, and yet both wounds were effectively obturated by the mucous coat, so that none of the contents escaped. He sutured both wounds, but the patient succumbed the same evening. The autopsy revealed two other wounds in the pyloric region of the stomach, and these also were obturated in a similar manner. M. Terrier said that occlusions effected in the manner described by his learned friend were well known, but he would nevertheless interfere on the first abnormal symptom. M. Reclus thought that the case of M. Berger was important, as it proved the reality of the mucous plugs, but they did not effect a complete cure of the wound; on the contrary, they retarded the cicatrix, as a ring of adhesive peritonitis formed around the aperture,

leaving the centre unhealed, and at this point an abscess was often observed.—*Med. Press*, April 25, 1888.

DISEASES OF WOMEN.

Jackson (A. R.) on Two Cases of Death Following Curettement of the Uterus.—During the past few years the uterine curette has been freely recommended for the diagnosis and treatment of various abnormal conditions of the womb, and it is unquestionably, for both these purposes, a valuable instrument. Its employment requires apparently so little skill, its effectiveness is so manifest, its results in many cases are so prompt and obvious, and so little has been said about the possible danger that may arise from its use, that it is not surprising to find it much more frequently resorted to than formerly.

There is a very general impression that curettement of the uterus is a safe procedure, not absolutely safe, of course, for this cannot be said of any wound-producing means, but that it is *almost* free from danger when performed with ordinary modern surgical care and precautions. This belief is, in my judgment, an unwarranted one, and is the result of erroneous, or rather imperfect, teaching.

Most authors, I am aware, warn against the use of the curette during the existence of pelvic inflammation or its recent sequelæ, at or near a menstrual period, etc., just as they do against the use of the sound, intra-uterine medicinal applications, and ungentle pelvic manipulations of any sort; but scraping of the cavity of the uterus is a very different operation from any of these, and much more dangerous, and it is upon this latter fact that I desire to lay stress, in order to assist in removing the present ill-founded belief in its freedom from danger.

The uterus is usually a patient, non-resenting organ, and therefore has been subjected to a great deal of abuse. Nevertheless, it does sometimes revolt against invasion and injury, although under the most capricious circumstances. The introduction of a sound has frequently been followed by inflammation; so, likewise, has been the placing of a vaginal pessary, and even a digital pelvic examination. On the other hand, the walls of the uterus may be forcibly stretched asunder; its interior mopped with powerful escharotics, its cavity occupied for many consecutive months with solid foreign substances, tumors imbedded in its walls torn from their attachments, and all without resulting pain, rise of temperature, or quickening of pulse. While this usual tolerance on the part of the uterus should be our warrant for doing what may seem necessary in any given case, the uncertainty of uterine conduct should, at the same time, make us hesitate about using any aggressive means not absolutely demanded.

I am induced to utter these words of warning by the fact that in my own practice there have occurred two instances in which death so rapidly and directly followed upon the use of the curette, that there could be no reasonable doubt as to the cause of the fatal result. In other cases I have seen lesser grades of *congestive* disturbance lasting from one to six or seven days, any one of which might, if unchecked, have gone on to inflammation. These results have appeared among a total of about fifty cases in which I have used the curette.

In addition to the cases herein related I have been furnished with the details of another, in which death, following the use of the instrument, occurred on the third day.

CASE I.—*Menorrhagia and Metrorrhagia—Curettement of the Uterus—Death from Peritonitis.*—M. E. H. consulted me on January 26, 1882. She was thirty-six years of age, had been married nineteen years, and had two children, the younger of whom was thirteen years old. Menstruation began at fifteen, and presented no unusual features until six years previously, at which time it became markedly more profuse. She was treated for this symptom, and her physician had removed "something" from the neck of the womb, and then applied "acid." She was benefited for a few months, but the menstrual discharge again became excessive, and intermenstrual bleedings likewise were of frequent occurrence. Many and various remedies were used without apparent benefit.

On July 14th I introduced a tupelo tent, and on the following day, the cervical canal being moderately dilated, and the vagina carefully washed with carbolized water, I removed, with the blunt curette, more than a teaspoonful of fungous granulations from the interior of the uterus. This was followed at once by a thorough

swabbing of the uterine canal with Churchill's solution of iodine. A cotton tampon saturated with a two and a half per cent. solution of carbolic acid in glycerine was then placed against the os uteri. This dressing was renewed daily, being preceded each time by a thorough syringing of the vagina with warm carbolized water. On the third day the patient had a chill, accompanied by pelvic pain, and followed by quickened pulse and rise of temperature. Prolonged hot-water douches were commenced at once and assiduously used. Symptoms of peritonitis rapidly developed, at first pelvic, and subsequently abdominal, and they continued until the death of the patient, September 5th.

CASE 2.—*Persistent Metrorrhagia—Curetting of the Uterus—Death from Pelvic Peritonitis.*—E. D., a large, healthy-appearing woman, applied to me on January 22, 1885. Menstruation commenced at 12, and had always been regular, and in every other respect normal. She had been married three years and had never been pregnant. During the past year menstruation had become more profuse, and on three occasions was excessive. Latterly a bloody flow was constant, and at times so abundant that she was no longer able to distinguish the menstrual periods.

I found the uterus of normal size, in proper position, free from tenderness, and noticeable only for a stenosis of the external os uteri. The introduction of the sound to the depth of three quarters of an inch caused a smart flow of blood. On the following day I introduced a small laminaria tent, which was removed at the end of twenty-four hours, and replaced by a sponge tent, which, after its introduction, was surrounded on all sides by slips of slippery elm, as is my custom when using sponge for dilatation of the cervix. On the day following, the dilatation being sufficient, the patient was etherized, and about a score of pinkish-gray masses, varying in size from that of a grain of barley to a small pea, were removed. Churchill's iodine was then applied to the endometrium.

No bleeding whatever was observed until February 21st, four weeks after the operation, at which time a discharge, which was thought by the patient to be menstruation, occurred and lasted four days. Eight days later, namely, March 1st, a very profuse bleeding took place, which was checked by tamponing the vagina.

During the next few weeks the patient took ergot, viburnum, hydrastis, and as applications to the interior of the uterus, I used alum, pure carbolic acid, Monsell's solution, zinc chloride, tannin, etc. These all seemed unavailing. In the spring of 1886 I made four or five weekly applications of fused silver nitrate. Following this there was a respite from hemorrhage, except the menstrual discharges, for three months. Then, without manifest cause, slight but constant bleeding again appeared.

In the belief that there probably existed some intra-uterine cause for the persistent discharge, I resolved to again dilate and use the curette. Accordingly, on December 23, 1887, the patient being etherized by Dr. J. H. Stowell, I dilated the cervix mechanically, and with the curette removed two unusually large fungoid masses from the interior of the uterus. These were all that could be found.

The patient emerged from the ether complaining of great pain, for which she was given a quarter of a grain of morphia hypodermatically. The pain continued, however, and the dose was repeated during the following night. On the 24th I found the patient still suffering from pain, with pulse 120, and temperature 102°.

Owing to my necessary absence from the city, the patient was under the care of Dr. Stowell for the following two days, and no record was kept of the case; but on my return I learned that there had been no abatement of the symptoms, and the temperature had risen to 104⅘°, and the pulse was 140. No evidences of abscesses were detected. Hot vaginal douches, at a temperature of 120°, were used every four hours, and continued an hour each time; morphia was given in sufficient quantities to assuage pain, but there was no apparent improvement in the patient's condition until the evening of the 30th, when the temperature fell to 100⅘°, and the pulse to 120. She now had a tablespoonful of Epsom salts, which, aided by enemata of beef tea, began to operate a few hours later. At midnight symptoms of general prostration supervened, and Dr. W. H. Joy was called in. I joined him later, and found the patient dying. She expired December 31st, at 7.30 A.M., eight days after the operation.

Without very extended or diligent research, I find the following two cases similar to the foregoing in recent medical journals:

Dr. Nilsen reported [1] to the Obstetrical Society of New York a case of death from peritonitis eight days after curetting.

Dr. Wm. Goodell also reports [2] a case in which a patient died two days after curetting, although he attributes the death to the use of the sponge tent which he had used for dilating the cervical canal.—*Annals of Gynæcology*, April, 1888.

Eliot (E.) on Spasmodic Stricture of the Urethra Following Labor.—N. P., aged twenty-three years, of nervous temperament, but otherwise healthy, was delivered naturally of a male child, weighing nine pounds, at 12.30 on the morning of December 30th. Her pregnancy had been marked by excessive gastritis in the earlier months, and by intercostal neuralgia in the latter, otherwise her health was good. On January 5th, at 3 o'clock in the morning, she passed her water, but afterwards failed to do so. Hot applications were made over the region of the bladder, but with no relief; the pain and nervous excitement becoming very great, at 7 o'clock in the evening I was called. With much difficulty a catheter was passed into the bladder, and a large amount of strongly smelling urine was drawn. On January 6th, at 11 o'clock in the morning, the catheter was again introduced, but with pain and difficulty; at 11.30 at night a cocaine cone was allowed to dissolve in the vagina, the end resting on the meatus urinarius; the catheter was introduced and the urine drawn off; the pain was very severe and the stricture very tight; a soft rubber catheter was substituted for the silver one. On January 7th, at 10 A. M., a cocaine solution, then a cocaine cone, was applied, a soft-rubber catheter introduced, and the urine drawn; pain severe and stricture very tight. At 9 P. M., an oleate of cocaine, 4 per cent., was applied to the urethra; after great persistence the soft-rubber catheter was introduced into the bladder; the pain and nervous excitement were so great that the catheter was clamped at the end and allowed to remain in place all night, directions being given to remove the clamp and allow the urine to pass at 1 A. M. and at 5 A. M. The catheter caused no inconvenience. On January 8th, at 10 A. M., the urine was passed through the catheter, and the catheter then taken out. At 8 P. M., the catheter was introduced after much difficulty and severe pain and nervous excitement. On January 9th, at 9.45 A. M., the catheter was introduced; the pain and nervous excitement and prostration following its introduction were so great that I determined to leave the catheter in the bladder, so, after clamping it, I gave directions to remove the clamp at 1, at 5, and at 8 P. M. The catheter was removed at 8.15 P. M. On January 10th, at 10 A. M., the pain on introducing the catheter was not severe, and the spasm less marked. At 9 P. M. there was very little pain or excitement on introducing the catheter. On January 11th, at 11 A. M., the introduction of the catheter caused no pain. On January 12th, at 11 A. M., she urinated without assistance.

During the entire time of the spasmodic stricture the patient was taking the bromide of sodium and the bromide of potash, in fifteen-grain doses every three hours, and the elixir of the valerianate of ammonia in dessertspoonful doses, but they did not appear to exert any influence on the spasm. In the beginning of the trouble I thought the urethral orifice might be irritated by the vaginal discharges, and to correct the acridity of them I ordered syringing the vagina with a solution of an antiseptic powder consisting of a combination of carbolic acid, alum, borate of sodium, glycerine, the crystalline principles of thyme, eucalyptus, gaultheria, and mint. While this solution had a most pleasing and soothing effect upon the patient, it did not in the least affect the stricture. After the recovery of the patient, she informed me that her aunt suffered in the same way at her confinement, so there appears to be in the case an hereditary influence.

Stricture of the urethra occurs frequently after confinements, but if I can credit the unsupported statements of physicians to whom I have mentioned my experience, they cannot have the degree of persistence as in this case, or mention of it would have been made in text-books on obstetrics. While the four-per-cent. solution of hydrochlorate of cocaine has given me good results generally, I cannot see why it should have failed me in this case.—*Med. and Surg. Reporter*, May 5, 1888.

McIntyre (J. H.) on a Rare Form of Laceration of the Female Perineum.—Mrs. L. M., æt. thirty, 5 ft. 4 in. in height, weight 134 lbs. In the early

[1] *Amer. Jour. Obs.*, 1886, p. 276.
[2] *Jour. Amer. Med. Ass'n*, March 13, 1886, p. 283.

spring of 1886, while attempting to adjust the fixtures at the top of a pair of lace curtains, she slipped off the step-ladder, and fell astride of the back of a chair, lacerating her perineum most frightfully.

I saw her one hour after the accident, and found her suffering from fright and shock. She had lost a good deal of blood and was in great pain. I found upon examination a gaping wound fully one inch in depth extending from the fourchette to the anus, and involving the perineal centre as well as the sphincter ani. The left labia were also incised and badly contused, as were also the tissues posterior to the anus. Deep sutures of silk-worm gut were introduced.

Considerable soreness and tumefaction followed, so much so that one of the sutures was cut on the second day to relieve the tension. All the sutures were removed on the eighth day, when union was found to be complete.

In this case I followed my usual habit of moving the bowels each day after the second, by means of small doses of cascara sagrada.—*St. Louis Med. and Surg. Jour.*, May, 1888.

MISCELLANEOUS.

Hamilton (D. J.) on Testing the Competency of the Valves of the Heart by Means of Air.—The ordinary method of testing the competency of the valves of the heart with water is admittedly faulty in many respects. It can be applied only to the aortic and pulmonary artery orifices, and even with them the pressure of one and one half to two inches of water, which alone can be retained in the attached portions of the vessels, does not represent any thing like the pressure to which they are naturally subjected. Hence a valve which during life might have been sufficiently incompetent to give rise to a murmur, may be found after death to be perfectly competent. The water method is also defective from the fact that the cusps of the valve are not seen in motion, so that the mechanism by which a murmur may have been elicited is incapable of being demonstrated in the post-mortem room. We possess, moreover, no exact method of gauging the amount of incompetency of the mitral and tricuspid, nor of ascertaining when they are competent.

For some time past I have been in the habit of demonstrating to my class the natural action of the valves by driving air into them instead of water, and also of reproducing the murmurs heard in disease of the valves by several simple modifications of the same method.

The ascending aorta with the attached valve is cut off from the heart of an ox. A brass tube attached to a bellows is introduced into the distal end of the aorta. The aorta is now fixed in as nearly as possible its natural position, and air is driven in from the bellows with a sharp click, so as to imitate as closely as may be the effect of the arterial recoil. With each inflation of the bellows the cusps are retracted, to be closed again as soon as the air is expelled; and so perfect is their adaptation, even after death, that not only do they prove perfectly competent when the heart is healthy, but the sharp sound elicited bears a remarkable resemblance to the second sound of the heart. The valve can be turned up in any position, so as to be made readily visible to a whole class.

The same means may be employed to display the action of the pulmonary artery valve. In the case of the mitral and tricuspid, the respective auricles should be cut away close down to the orifices. The nozzle is pushed down through the aorta or pulmonary artery, as the case may be, past the valve, so that it enters well into the cavity of the ventricle. It is tied into the vessel so as to prevent regurgitation of the air.

It struck me that the same means might be utilized for testing the competency of the valves in the post-mortem room; and, having employed the method lately in a number of cases, I find that it works admirably. It can be applied almost as quickly as the water test, and has the great advantage of being available for all the orifices.

The procedure I adopt is the following: An opening is made into the left auricle, so as to expose the auricular aspect of the mitral. Any post-mortem clots which may be adhering to the edge of the valve are removed with care, so as not to disturb the position of the cusps. An aperture sufficiently large to admit the brass nozzle is next made into the apex of the left ventricle, in the line of incision which will afterwards be required to lay the ventricle open. The nozzle is then introduced, and air driven in by the bellows in the manner before described. The heart should meanwhile be suspended by the cut edges of the auricle. A series of hooks fixed on sup-

ports is useful for this purpose, the supports being movable so as to allow of the proper apposition of the cusps.

The slightest incompetency can be detected quite as much by the irregular manner in which the cusps mutually adjust themselves, as by the escape of air between them.

The same means of demonstration is to be followed in the case of the tricuspid, and, after its condition has been ascertained, the incision in the left ventricle is carried up as close as possible to the root of the aorta, without, of course, injuring the aortic ring. The heart is now suspended, as before, by the cut edges of the ventricle, and the nozzle is tied into the distal end of the aorta. The aorta should either be cut off at the termination of the ascending part of the arch, or be laid open up to this point. The nozzle, both in the case of the mitral and in that of the aortic, may be simply held in with the hand, or it may be tied in; or, what is even preferable, a simple clamp apparatus may be attached to its extremity, which seizes the cut edge of the vessel or cavity into which the nozzle is introduced, and holds it air-tight, or nearly so. In watching the action of the valve, the ventricular aspect should be turned upwards, the air being driven in from below.

The pulmonary artery orifice is next tested in the same manner.

In a perfectly healthy heart it will be found that the aortic, mitral, and pulmonary artery valves are quite competent, but, so far as my present experience goes, I have never met with a tricuspid in man which will stand the test. There is always a slight leakage, even when the cusps are perfectly free to move.—*Brit. Med. Jour.*, April 28, 1888.

BOOK NOTICES.

Diseases of Man: Data of their Nomenclature, Classification, and Genesis. By John W. S. Gouley, M.D., Surgeon to Bellevue Hospital: J. H. Vail & Co., New York: H. K. Lewis, London. 1888. 8vo, pp. 412.

"The objects of this book are," according to the preface, "first, to urge the official adoption of a stable basis for the nomenclature and classification of the diseases of man; second, to place before the medical profession certain propositions directed to an improved classification of diseases; and third, to awaken the attention of teachers to the necessity of ameliorating the nomenclature of medicine; pointing out some of the many misused and improperly formed words that are now current, and proposing new terms for their consideration."

In one section of the book, on human nosography, synopses of the systems of Sauvages, Cullen, Parr, Good, and Delorme, are given. Section III. contains a chronological list of the works on nosography that have appeared from the year 1602 to the present day.

Section IV. is on the basis and method of the classification and character of the nomenclature of the diseases of man, while Section V. is a review of the morbid states and morbific processes, to which is appended a comprehensive classification of bacteria, with a description of ptomaines, leucomaines, and extractives.

Among the conclusions drawn by the author from his studies the following are important:

The only stable basis for nosography is anatomy.

A nomenclature, to be satisfactory, must not admit the application of the names of men to diseases, or any name which does not convey an intelligible idea of a morbid condition.

Essays on Hysteria, Brain-Tumor, and Some Other Cases of Nervous Diseases. By Mary Putnam Jacobi, M.D., author of "The Question of Rest for Women during Menstruation," etc. 8vo, pp. 213. G. P. Putnam's Sons, New York and London. 1888.

This work consists of seven essays from the pen of one of our best known and most gifted writers. The essays, most of which have been read before medical societies, and some of which have appeared in medical journals, have been revised and in many instances amplified for presentation in book form.

The articles are:

I. Some Considerations on Hysteria.
II. Tumors of the Brain.
III. Note on the Special Liability to Loss of Nouns in Aphasia.
IV. Case of Nocturnal Rotary Spasm.
V. The Prophylaxis of Insanity.
VI. Antagonism between Medicines and between Remedies and Diseases.
VII. Hysterical Locomotor Ataxia.

All the articles embody original work and thought. The chapter on cerebral tumors is an especially commendable review and analysis of the whole subject, extremely valuable for its statistical material.

Photographic Illustrations of Skin Diseases. A Complete Work on Dermatology. An Atlas and Text-Book Combined. Second Series. Complete in twelve parts. By George Henry Fox, A.M., M.D., etc. E. B. Treat, New York. Price per part, $2.00.

Parts III., IV., V., and VI. are now issued. Their contents are as follows:

Part III. Eczema rubrum et squamosum, eczema squamosum, eczema, intertrigo, and eczema faciei.

Part IV. Eczema barbæ, sycosis barbæ, trichophytosis barbæ, eczema squamosum, eczema syphiloderma, dermatitis exfoliativa, and psoriasis guttata.

Part V. Psoriasis nummulata, annulata, diffusa, manum, and pedum.

Part VI. Lichen planus, pityriasis circinata, lichen ruber, herpes facialis, zoster frontalis, and zoster lumbo-femoralis.

To say that both illustrations and text are fully up to the previous high standard of the work is a sufficient guaranty of their excellence.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital.

VOL. V., No. 21. May 24, 1888. WHOLE No. 69.

CONTENTS.

	PAGE
Leading Article	245
Medicine	248
Diseases of Women	251
Miscellaneous	253
Book Notices	256

LEADING AND ORIGINAL ARTICLE.

BY CHARLES H. KNIGHT, M.D.

Malignant Disease of the Larynx.—The subject of cancer of the larynx offers for discussion three questions: (1) Does malignant disease ever result from transformation of a benign growth in consequence of operative interference? (2) How shall a diagnosis be made? (3) What is the proper treatment? Obviously these points are closely related. Can it be shown that repeated endolaryngeal operations in the case of papilloma of the larynx tend to provoke malignant degeneration of the growth, the use of laryngeal forceps and snare will become less popular, and we shall be disposed to resort to an external operation, or to adopt an expectant line of treatment. A new growth, superficially benign, may have a malignant base. Fragments removed with forceps present nothing suspicious until, after repeated operations, the microscope shows us well-marked indications of malignancy. The case may possibly then be put down as one of transformation of benign into malignant growth, whereas from the first it may have been of the latter type.

In comparing thyrotomy with endolaryngeal methods of operating for neoplasms, Bruns[1] asserts that the danger of malignant degeneration of a benign growth as a result of intralaryngeal treatment has been greatly magnified, yet such examples of this degeneration as have been referred to by Esmarch[2] and others are occasionally met in other regions, even in the absence of a special irritating cause. Cancer of the scrotum in chimney sweepers and epithelioma of the lip in smokers are often quoted to illustrate the effect of prolonged irritation. The observations of Michel, Hopman, and Schaeffer, and more recently a case reported by Bayer,[3] seem to prove the occurrence of this change in nasal myxomata. If this be true of neoplasms of such simple structure within the nose, it may apply equally to laryngeal new growths. The case reported by Bayer was verified by microscopical examination and proved to be a villiform carcinoma implanted upon a simple mucous polyp. Here the transmutation seems to have been spontaneous; at any rate, there is no record of previous operative interference. A similar case has been referred to by Heymann.[4] A patient, who had several times been operated on for nasal polyp, finally appeared with a large intranasal tumor, which, on extirpation, proved to be a melanotic sarcoma. At many points the form of transition into carcinoma described by Virchow[5] was observed.

In the second edition of Lennox Browne on "Diseases of the Throat" (p. 422), certain propositions, relating to laryngeal neoplasms, and first published in the *British Med. Jour.*, May 8, 1875, are repeated. Of these the fifth reads as follows: "While

[1] "Die Laryngotomie zur Entfernung endolaryngealer Neubildungen," 1878.
[2] *Arch. für klin. Chir.*, B. xxii., H. 2, 1878.
[3] *Rev. mens. de laryngologie*, etc., Jan., 1887, p. 17.
[4] *Rev. mens. de laryngologie*, etc., No. 1, 1888, p. 24.
[5] *Archiv. für path. Anat.*, etc., B. cxi., H. i.

primary malignant or cancerous growths are of rare occurrence within the larynx itself, benign growths not unfrequently assume a malignant and even cancerous character by the irritation produced by attempts at removal." This rather dogmatic statement has provoked some controversy, and it certainly seems to need modification, in view of the small amount of clinical evidence in its support. In attempting to sustain his position Browne quotes five cases reported by various observers.[1] But one of these cases is substantiated by what seems to be conclusive evidence. The others have very imperfect histories, incomplete microscopic endorsement, or the interval between the malignant change and the endolaryngeal manipulation was so long as to leave no reason for believing that the operation had any thing to do with the change. In replying to Browne, Semon admits two cases quoted by the former (Wagner, Tauber), and adds four (Beschorner, Stoerk, Gibb, Rumbold), making in all six cases which may be thought to confirm this theory. Browne himself seems to have receded a little from his first stand, since the term "frequently," used in his original statement, has latterly been replaced by the milder expression, "not unfrequently." It remains to be seen whether the further substitution of the word "rarely" may not bring the proposition nearer the truth.

At the last meeting of German Naturalists and Physicians, Schnitzler[2] reported a case of epithelioma of the larynx, with implication of the cervical glands and pleuritic deposits. Some months before the patient had been operated on for papilloma of the larynx, the galvano-cautery being subsequently used to prevent recurrence. This observer claims to have seen only three cases of transformation in hundreds of examples of benign growth, and he does not believe that we should be deterred from endolaryngeal operations by dread of this possibility. Morelli reported a case, the only one he had seen for nearly ten years, in which malignant development occurred about one year after removal of an extensive papillomatous growth by tracheotomy, thyrotomy, ablation, and galvanocauterization. Seifert related an analogous case, proved by the microscope to have been papilloma at the outset, which was treated by Böhmer and Gerhardt for a year, when carcinoma developed. The larynx was extirpated, but the patient survived the operation only a short time. In his work on "Diseases of the Larynx" (p. 132), translated by M'Bride, Gottstein, in speaking of papillomata, merely says, "a few authors have recorded instances of their development into epithelioma," but he cites no cases. At the time of the publication of his work, Fauvel[3] had seen only three cases, and only one of these was thought to have resulted from what he calls "internal traumatism." Sir Morell Mackenzie,[4] whose brilliant operations have done much to place endolaryngeal surgery in its present position, states that he knows of only three cases in which transformation can be suspected, and he is not aware that in any case treatment exercised an unfavorable influence. Stoerk[5] evidently believes in the possibility of this transformation, and, although he does not discard endolaryngeal surgery in papilloma of the larynx, he advises the avoidance of irritating applications. He gives a minute description of the structural changes which take place in a benign growth undergoing the process of transformation. Virchow also has maintained that papillomata in particular are prone to malignant degeneration, while Hopman[6] states that he has never seen transformation of papilloma into malignant growth.

It is fair to conclude that traumatism alone is not capable of creating malignancy. Other elements are essential. Constitutional vice, or predisposition, may be a necessary antecedent, a place having been prepared for a morbid process, or for the entrance of germs, by prolonged mechanical irritation, the vitality and consequent resisting power of the tissue being thereby diminished. The number of laryngeal neoplasms observed now reaches many thousand, and the majority of these were subjected to repeated operations. Authentic instances of malignant change occurring in a benign laryngeal growth are so few that there is no reasonable ground for inferring

[1] *Brit. Med. Jour.*, June 11, 1887, p. 1305.
[2] *Jour. of Laryngology and Rhinology*, Jan., 1888, p. 29.
[3] "Mal. du larynx," 1876, p. 697.
[4] "Diseases of the Throat and Nose," 1880, vol. i., p. 317.
[5] *Wiener med. Wchnschr.*, Dec. 3 and 10, Nos. 49 and 50, 1887.
[6] *Jour. of Laryngol. and Rhinol.*, April, 1888, p. 180.

a special tendency to such change, or to refrain from endolaryngeal interference in suitable cases.

In the matter of diagnosis it must be admitted that in many cases the gross appearance of a lesion does not betray its character. This is notably true of a malignant ulcer obscured by papillomatous overgrowth, or complicated by an extreme degree of simple inflammatory infiltration,[1] or an extensive suppurative process.[2]

Tubercle, syphilis, malignant and benign neoplasms possess so many features in common that errors in diagnosis must occur, if we rely solely upon laryngoscopic appearances. Nor do the clinical history and the subjective symptoms furnish in every case indubitable proof. According to Von Ziemssen, hoarseness is the earliest and most lasting symptom of cancer of the larynx, and glandular enlargement is the least constant. Semon has attempted to explain the latter phenomenon by ascribing to the lymphatic system of the larynx a peculiar isolation, a theory which seems to have been demolished by Lennox Browne, in his work already referred to, chiefly by quotations and plates from Sappey's "Treatise on Anatomy." In a case reported by Desormeaux, quoted by Ziemssen, which had existed for over three years and had progressed to almost complete destruction of the soft parts and the framework of the larynx, there were no enlarged glands nor cachexia. Immunity of the glandular structures was a marked feature in a case of epithelioma of the larynx recently reported by Delavan.[3] Laryngeal pain, cough, dyspnœa, dysphagia, hemorrhage, cachexia, may be absent, or their presence may be explained on other grounds. This point is strikingly illustrated by a case related with many interesting details by Lister and Yeo.[4] Aphonia and dyspnœa, of which the patient complained, were supposed to be due entirely to a large thoracic aneurism, until laryngoscopic examination revealed the presence of an extensive laryngeal neoplasm, which proved to be malignant. There are, however, two symptoms of malignant disease of the larynx which have received less notice than they possibly merit. The first is subjective and consists of pain shooting from the larynx towards the ear of the affected side. This symptom has been particularly noticed by Ziemssen,[5] and was very marked in a case reported by Schech[6] in 1879, who considered it an early and important sign of laryngeal carcinoma. The other symptom has been especially referred to by Semon,[7] and more recently by Stoerk[8] and by Mackenzie[9] of Edinburgh. It is disclosed by the laryngoscope, and is seen in impaired mobility of the vocal cord on the affected side of the larynx, the action of the laryngeal muscles being impeded by the infiltration so characteristic of malignant disease. Yet many cases fail to present these as well as other symptoms, and we are forced to appeal to the microscope. In his search for morbific germs the histologist seems to have been less successful in the field of malignant disease than elsewhere. Claims of the discovery of a cancer bacillus have reeently been made in Italy by Barnabei and Sanarelli, in France by Perrin, in Brazil by Domingos Freire, and in Germany by Schill and by Scheurlen.[10] The most importance is perhaps attached to the observations of the last-mentioned experimenter. Two inoculation tests with cultures derived from mammary cancers succeeded in producing tumors showing bacilli identical with those already found in the cultures and believed to be characteristic of cancer. These results have been tested by Emil Senger[11] in sixty-five experiments, which failed to verify them. On the other hand a diplococcus was detected in the cells and secretions of sixteen malignant tumors examined by Rappin.[12] One inoculation experiment with cultures succeeded, the animal dying of cachexia in three months. At the point of inoculation a node had formed having the microscopic appearances of cancer. In the liver and mesenteric glands were found deposits from which were derived pure cul-

[1] ORECCHIA. *Gas. di Ospitali*, Mar. 4, 1888, p. 151.
[2] H. MARSH: "On the association of suppuration with malignant disease." St. Barth. Hosp. Rep., xxiii., 1887. p. 147.
[3] *N. Y. Med. Record*, Mar. 31, 1888, p. 368.
[4] Trans. Lond. Clin. Soc., vol. xi., 1878.
[5] "Cyclopædia of the Practice of Medicine" (Am. ed.), vol., vii., p. 893.
[6] *Deutsche Arch. f. klin. Med.*, vol. xxiii., H. 1 and 2.
[7] Heath's "Dictionary of Surgery," vol. i., p. 895.
[8] *Wiener med. Wchnschr.*, Dec. 3 and 10, 1887.
[9] *Edinb. Med. Jour.*, Dec., 1887, p. 502.
[10] *Deutsche med. Wchnschr.*, No. 48, 1887, p. 1033.
[11] *Berl. klin. Wchnschr.*, No. 10, Mar. 5, 1888.
[12] *Gas. méd. de Nantes*, May and Aug., 1886. *Union méd.*, Dec. 10, 1887.

tures of the original bacillus. The cultivation experiments of Ballance and Shattock gave negative results, yet these observers conclude that "the circumstantial and comparative evidence appears to be so complete that we do not doubt that cancer is, in its essential pathology, a parasitic disease."[1] The results thus far obtained encourage the hope that in time a microbe pathognomonic of cancer may be discovered, in case further experiment shall fail to confirm the significance of Scheurlen's bacillus.

Aside from the question of bacilli it is important to know whether the testimony of the microscope is reliable. The matter was discussed at a recent meeting of the N. Y. Path. Soc.,[2] and it is gratifying to have the assurance of that body to the effect that the microscope may be confidently accepted as a means of differential diagnosis. The number of errors for which it is responsible is very small, while there are many reported cases in which it has confirmed or happily dispelled suspicion. The extraordinary difficulties sometimes encountered are exhibited in a case reported by Satterthwaite at the meeting referred to, and in one reported by Hajek,[3] in which all diagnostic resources seem to have been exhausted without furnishing positive proof. Wolfenden and Martin, in their "Studies in Pathological Anatomy," say that "the situation, color, size, etc., of a growth by no means necessarily indicate its nature." They also call attention to three important points in the anatomy of papilloma as distinguished from epithelioma: (1) The integrity of the basement membrane, and even, where this is indistinct, the preservation of the epithelium in an unbroken line. (2) The absence of finger-like projections of the epithelium into the stroma. (3) The so-called "nests" in the epithelium of the papillæ bear no resemblance to the "nests" of epithelioma.

It is very evident that in the early stages of disease a positive conclusion can only be reached through a consideration of all the symptoms and of the laryngoscopic appearances, together with the aid of the microscope. A diagnosis may be made by a process of exclusion. For example, the absence of pulmonary signs and of tubercular antecedents would tend to eliminate tuberculosis. The propriety of using tentative specific treatment, when syphilis may be suspected, seems to be unquestioned. Yet it must be borne in mind that improvement may follow in consequence of the coexistence of syphilis and cancer. Unfortunately, in many cases, the period in which a radical operation would have been justifiable will have elapsed before a decision can be assured.

[1] Trans. Lond. Path. Soc., vol. xxxviii., 1887, p. 434.
[2] *Med. Record*, N. Y., Dec. 24, 1887. Trans. Path. Soc., vol. iii., p. 329.
[3] *Brit. Med. Jour.*, Mar. 17, 1888, p. 609.

MEDICINE.

Lancereaux on Lesions of the Pancreas in Diabetes Mellitus.—In continuation of a former communication on this subject the author relates the histories of four cases, in which autopsies were obtained, which are thus summarized:

Case I., man of forty—Polydipsia and polyphagia; polyuria with glycosuria; anaphrodisia; debility; pulmonary tuberculosis and death. Atrophy of the pancreas by obliteration of its duct—no calculus; fatty degeneration of all that part of the Parenchyma behind the obliteration.

Case II., woman of forty-five—Diabetes with emaciation; gingivitis with loss of teeth and alopecia. Obliteration of the pancreatic ducts by a hard calculus, the size of a pea; fibro-fatty degeneration of the pancreas.

Case III., man of twenty-nine—Polydipsia and polyuria; polyphagia with glycosuria; sexual impotence; debility; pulmonary tuberculosis and death. Fatty atrophy of the pancreas.

Case IV., man of fifty-one—Polydipsia and polyuria; polyphagia and glycosuria; purulent pleurisy and death. Atrophy of the pancreas.

Of fourteen fatal cases observed by the author, two had calculous obstruction of the pancreatic duct; one had obliteration of the same duct, without known cause; nine had acute or chronic degeneration of the pancreas similar to the change in acute atrophy of the liver, and two had sclerosis of the organ, with dilatation of the pancreatic duct.

The author has seen lesions of the pancreas so often in saccharine diabetes that he has ceased to consider them as complications, but looks upon them as etiological factors.—*La France Méd.*, May 3, 1888.

Potain on the Treatment of Tubercular Pneumothorax by Evacuation of the Fluid and the Injection of Sterilized Air into the Pleural Cavity.—A man of 23 entered the hospital with a history and physical signs pointing to a pneumothorax on the right side and a tubercular phthisis in the third stage in the corresponding lung. After 10 months' treatment he was discharged cured of both pneumothorax and phthisis. No operative measures were resorted to until the fluid accumulation in the chest had become of considerable amount. The author then conceived the idea of withdrawing the fluid and replacing it by sterilized air.

In attempting this he had two motives: first, he was afraid that a sudden withdrawal of the fluid would lead to a re-opening of the pulmonary cicatrix by the compensating expansion of the lung, and secondly, he supposed the fluid serous, and thought by admitting sterilized air that it would remain aseptic. His mode of procedure was as follows: Two bottles of about 2 litres' capacity, were connected by rubber tubing connecting in each bottle with a glass tube extending to its bottom. One was filled with a strong solution of carbolic acid, which, when the other bottle was lowered, run out by syphon action, drawing in to fill its place air sterilized by passing through a tube heated to 200° C., and later through sterilized cotton.

A needle, connected with an ordinary aspirator, was introduced in the 7th intercostal space and 1500 cc. of fluid withdrawn, while, by a reversal of the process described above, the sterilized air was allowed to escape into the chest through a fine, short needle plunged in the sixth intercostal space.

No fever or reaction followed the operation, but the fluid reaccumulated and had to be similarly withdrawn three times in five months.

The author has in this way treated two similar cases, one of which, when apparently well, committed some indiscretions which again lighted up the tubercular affection, of which he died. The author thinks the prolonged rest and inactivity the lung gets under this treatment conduces to healing and cicatrization of the tubercular lesions.—*Le Praticien*, April 30, 1888.

Sweet (A. L.) on an Epidemic of Jaundice.—The writer gives it as his opinion that not less than two hundred cases of jaundice have recently occurred in his immediate vicinity. Children from six to twelve years of age have, for the most part, been the subjects of the malady.

The symptoms in all these cases have been quite uniform. For five or six days previous to the attack the patient would complain of a feeling of general *malaise*, with loss of appetite, nausea, and vomiting, if the food ingested were of rich quality or much in quantity. At the end of this time, profound jaundice would supervene quite suddenly, and, singularly enough, the patient would feel better after this had happened. The discoloration of the skin would remain a long time even after the patient was out and around as usual. The urine was somewhat thick and highly colored, but the character of the evacuations from the bowels was not greatly changed. These symptoms point, perhaps, to a catarrhal condition of the gastric mucous membrane, which, in time extending to the common duct, produced the jaundice. In the matter of treatment, I think the profession has agreed that it required very little. Aloin, mercury, and podophyllin were all used, and probably with some benefit, as was also phosphate of sodium; but a careful regulation of the diet constituted the main element in the treatment.

In regard to the etiology of the disease, there is just one thing that occurs to me as a possible cause. There has been very little rain here for the past year, and consequently the wells have been very low; in fact, some of them became altogether dry. Of course, when the water in a well becomes very much diminished in quantity, whatever is held in solution is relatively much greater than under ordinary circumstances. Our village water-supply comes from springs, which have suffered, of course, in the general drought. There are two queries in connection with this subject about which I would like to hear from your readers: 1. Why was the jaundice so long delayed after the poison (whatever it was) had plainly begun to manifest itself in the system? 2. Why did the patient experience relief (or seem to do so) when the jaundice appeared to be analogous to the appearance of the eruption in a zymotic disease?—*Medical Register*, Apr. 7, 1888.

Anderson (L. B.) on Delirium Tremens.—The indications are to remove the pent-up secretions, to excite the secretory

organs, and thereby remove the sources of the poison, as well as to eliminate that already generated from the system. To accomplish these ends, calomel in large doses is almost absolutely infallible. Large doses of cayenne pepper attain indirectly the same end. But in a case recently under my care, in which other physicians had failed to produce sleep, or even quietude, by morphia, opium, chloral, bromide of potash, paraldehyde, etc., pepper also failed, when twenty grains of calomel, followed by a large dose of sulphur in four hours, produced calm and refreshing sleep in six hours, from which the patient awoke to discharge an unusually large quantity of bile, with prompt relief of all his troubles. —*Gaillard's Med. Jour.*, May, 1888.

Irwin (J. W.) on a Case Illustrating the Importance of Early Diagnosis in Abscess of the Liver.[1]—The patient was a man of forty-one, with phthisical antecedents. His occupation exposed him to night air and dampness of a malarial region. He was an immoderate eater, drinker, and consumer of tobacco. Three years before he had piles, and at the same time two attacks of hematemesis.

In the present illness he suffered from the following symptoms:

Skin, dry and harsh; lividity of the face, suffusion of the eyes, tongue coated and indented, husky voice, dyspnœa, hollow, dry cough, indigestion, diarrhœa of a grayish-white color, pain in epigastric region extending to the right; urine, normal in amount, of an orange-red color, no albumen or sugar; sleep lately disturbed and unrefreshing; fever coming on at night, and lasting until noon the next day; on examination, the lungs were found healthy; there was a distinct systolic cardiac murmur; liver dulness extended three inches below the free border of the ribs, and the hepatic region was tender and swollen. The pulse was 110, and the axilliary temperature 100.2°. Treatment consisted in the application of a large fly-blister on the hepatic region, and two drachms of the following mixture:

℞	Acetate of potash	ʒ i.
	Sweet spirits of nitre	ʒ i.
	Tincture of digitalis	ʒ ii.
	Simple elixir	ʒ ii.

A saline laxative was given each morning. The third night morphia was given for sleeplessness. On the seventh day a teacupful of blood was vomited. From the ninth day five grains of quinine were given three times a day for four days. On the tenth day, some swelling and soreness remaining, another blister was applied. The relief following this was most marked, and uninterrupted improvement took place.—*Am. Pract. and News*, May 17, 1888.

Worcester (W. L.) on the Mortality of Epilepsy.—From a study of the statistics of 54 American institutions, the author concludes that the mortality among epileptics amounts to 27.8 % of the number of epileptics admitted. Of the 62 deaths which have occurred in his institution, 19 were due to epileptic convulsions, 17 to the status epilepticus.

Of 234 epileptics treated in the asylum only 36 or 15.4 % attained the age of 45, during their residence in the asylum.

It may not be amiss to mention that in this institution chloral hydrate in full doses, administered by the rectum, if the patient is unable to swallow, has proved very efficacious in arresting convulsions in the status epilepticus, and in allied conditions, in cases of general paresis and of gross organic disease of the brain, and in not a few instances, has seemed to be the means of saving or prolonging life.—*Med. Record*, April 28, 1885.

Webber (S. G.) on a Study of Arterial Tension in Neurasthenia.—Neurasthenic patients may be divided into several classes: First, those in which the vascular tension is nearly or quite normal. There are a few such, who seemingly have been only temporarily run down, and quickly recover.

Another class may be formed of those who at first show a decided loss of vascular tone, who, after a course of treatment, regain a normal tension. These usually recover in a longer or shorter time.

A third class are those whose vascular tone is very much below normal; who show a variable condition of the vaso-motor system, sometimes apparently gaining a little, then losing ground, but on the whole making no substantial progress. Many of these have an hereditary tendency to an unstable nervous equilibrium, or there is some condition of the system that reacts unfavorably upon the circulation. These cases do not improve much, and whatever is gained

[1] [While considerable doubt exists as to the accuracy of the diagnosis in the present case, it being probably a case of hypertrophic cirrhosis, a synopsis of it is given, as the treatment was intelligent and successful.]—Ed.

is of very doubtful permanency; there is a lack of vascular stability which is unfavorable to recovery.

Some of the worst cases show a great variation within a few minutes, one tracing being only slightly variant from the normal, the next, taken within five minutes, showing a great loss of tension.

It may be said that the sphygmograph is an aid in determining the amount of exhaustion; and by comparison of tracings taken at intervals the progress of the patient toward recovery can be estimated, no gain being permanent unless the tension of the arteries is permanently restored.—*Boston Med. and Surg. Jour.*, May 3, 1888.

Stomach Flatulence in Heart Disease.—In a paper on "The Effects of Moderate Drinking on the Human Constitution,"[1] Dr. Geo. Harley emphasizes the danger attending gaseous distension of the stomach in heart disease. He ascribes many cases of sudden death to this cause, affirming that a stomach thus distended may so press up the diaphragm as to interfere with cardiac movements to the extent of finally causing their arrest.

Dr. H. F. A. Goodridge,[2] while assenting to the above views, maintains that the sudden evacuation of such a gaseous accumulation may produce the same result, and cites a case of a friend of his who suddenly fell insensible after belching an immense volume of gas.

DISEASES OF WOMEN.

Homans (J.) on Ovariotomy in a Patient Eighty-two Years and Four Months of Age; Recovery.[3]—A lady of the age above mentioned was referred to me through the kindness of Dr. Charles A. Dewey, of Rochester, N. Y. The patient was a widow, and had been the mother of five children, the youngest being forty-three years of age. On examination I found a tumor of the left ovary, apparently without adhesions, in an active, healthy woman. The presence of the tumor had been known for about two years, and it had grown rapidly during the last six months. The lady said that if the tumor was likely to render the remainder of her days uncomfortable she would like to have it removed.

On January 28, 1888, I removed the cyst, which proved to be one of the left ovary, somewhat multilocular and papillomatous. The fluid weighed thirteen pounds, and the solid portions one and three-quarter pounds.

On the sixth day the temperature rose to 100.5° F., but subsided the next day; and the patient went home on March 2d. The oldest women on whom I had previously operated were each seventy-three years of age—one on November 19, 1881, and the other on December 26, 1883. Both of these ladies are now living in good health. Sir Spencer Wells' oldest case was seventy-one, and Dr. Keith's seventy-three. Mr. E. Matthews Owens, of Australia, has just operated successfully on a patient seventy-nine years and ten months of age.[4] I could find no case as old as eighty years, but, to make assurance doubly sure, I communicated with Dr. J. S. Billings, at Washington, and at his request Dr. Lorini made a thorough search without finding any case recorded older than seventy-eight years of age.

"WASHINGTON, March 16, 1888.

"DEAR DOCTOR:—Some days since Dr. J. S. Billings handed me a letter, with the request to look up the subject of ovariotomy in women of eighty years and over. Through the kindness of Dr. Robert Fletcher I have been enabled to see the unpublished catalogues, numbering several thousand. I have looked up all the statistical tables obtainable, and consulted all the works on the subject in all languages, including Russian, Swedish, Hungarian, etc.,—in a word, I have been over the subject most carefully, and have failed to find a single case recorded in any journal, pamphlet, or book.

"I found quite a number of cases where the operation was done in women of seventy years and over; the oldest cases being two, reported in Italy, in women seventy-five years of age, and one in Russia seventy-eight years of age. The result is a disappointing one to the seeker, but it will probably be satisfactory to the gentleman who ordered the work done. I enclose bill for services. "Yours very truly,

"R. LORINI."

It will be seen from the above that not a single case of ovariotomy in a woman

[1] *Lancet*, March 24, 1888.
[2] *Lancet*, April 21, 1888.
[3] Believed to be the oldest case on record.
[4] See ANALECTIC, 1888, p. 178.

eighty years of age, or older, has ever been reported, if Dr. Lorini's search has been exhaustive, and I think we may consider it so.—*Med. Record*, May 5, 1888.

Lucas (R. C.) on a Case of Tumor of the Right Ovary in a Child of Seven, Associated with Precocious Puberty.—The patient was admitted in December, 1884, for a tumor of the abdomen, and the mother had noticed some time before that the child at times had a dark, blood-stained vaginal discharge. Other signs of puberty were also present, viz., firm breasts as large as oranges, and a mons veneris covered with hair an inch in length. The tumor was firm and slightly lobulated. This extended from the right iliac region to within two fingers' breadth of the left anterior superior spine, and from the pubes upwards to one inch above the umbilicus. The child menstruated whilst under our observation on the 7th, and again on the 25th of January, 1885. Mr. Lucas performed ovariotomy on February 4, 1885. The tumor was a solid round-celled sarcoma. The child menstruated again on February 6th, two days after the operation, but from this time it ceased. The signs of puberty also gradually receded, the breasts again becoming flat. The child made an excellent recovery, and when seen two years and nine months after the operation, was in perfect health, and showed no signs of recurrence.—*Lancet*, May 5, 1888.

Doran (A.) on a Case of Malignant Disease of the Right Fallopian Tube and Ovary.—The tube was dropsical, and its walls were invaded by a cancerous growth. The ovary was small, but completely converted into new growth. The patient was a married woman, aged forty-eight. For three years she had been subject to a clear vaginal discharge, which sometimes contained membranous fragments. In January, 1887, Dr. Amand Routh scraped out the interior of the uterus, removing a quantity of red fungous growth. An attack of pelvic inflammation followed, and during the patient's recovery a tumor was detected rising to the right above the pubes. The tumor grew slowly larger, and the patient lost flesh; fragments of solid matter came away in the discharge. On March 1, 1888, Mr. Knowsley Thornton removed the tube and ovary. The patient recovered. The uterus was free from malignant disease. A series of sections of the new growth were also exhibited. The tumor substance was made up of collections of large polymorphous cells, surrounded by trabeculæ, which were infiltrated with small cells. A few tubules lined with ciliated epithelium were to be seen; they were surrounded by a wide area of large flat cells. The tubules and their surroundings suggested the glands which, as Henning and Bland Sutton have demonstrated, exist in the Fallopian tube, and further indicated that the cancer originated in those glands. The same collections of large cells (with wide oval spaces caused by vacuolation) and trabeculæ, showing small cell infiltration, were to be seen in sections from the ovary. The history of the case and the small size of the infected ovary compared with the large proportions of the growths in the tube would appear to prove that the tube was the primary seat of cancer. A cancerous ovary grew very rapidly, and seldom infected the tube till it had become a large tumor. Only three cases of primary malignant disease of the tube had been described. The first (Scanzoni's) was doubtful; in the second (Dr. Senger's of Breslau) the tumor was sarcomatous; the third occurred in Dr. Martin's practice, and was described by Dr. Orthmann as an instance of truly cancerous papilloma. In the specimen exhibited by Mr. Doran, malignant degeneration of previously innocent papillomatous growths might have taken place; but in any case he believed that the cancer was histologically of glandular origin.—*Lancet*, May 5, 1888.

Alexander (W.) on a New Method of Treating Hitherto Incurable Cases of Incontinence of Urine in Women.—The first case he operated upon was a woman belonging to the theatrical profession, who often had to retain her urine for unduly prolonged periods of time. This ultimately determined a paralysis of the sphincter of the urethra. To remedy the distressing effects of this condition of things various methods of treatment were employed, but in vain, and ultimately he dissected out the urethra, and led it into the rectum, hoping to utilize the rectal sphincter for the retention of urine. At the third attempt he succeeded, and the patient was much relieved. He also read the notes of two other cases in which he had operated for vesico-vaginal fistulæ by closing the vulva and carrying the urine into the rectum.—*Med. Press*, May 2, 1888.

Abdominal Pressure in Hysteria.—Dr. A. M. Dokhman, in a note communicated to the *Russkaya Meditsina* on the arrest of hysterical paroxysms by pressure on the "ovary," points out that the treatment is by no means new, as blows on the abdomen used to be administered by means of iron instruments in the Senmedarski epidemic, and were employed very largely by Goltz as early as 1727. He suggests that, although pressure is made over the region of the ovary, it does not appear that the ovary had much to do with the effect produced, for similar pressure is efficacious where no ovary exists—that is to say, in male patients. He is disposed to compare the effect to that produced by compression of the carotid artery, which will sometimes arrest a paroxysm, and he suggests that the sudden stimulation of the splanchnic nerves may produce an alteration in the vaso-motor relations, and in this way may cause the arrest of the paroxysm.—*Lancet*, April 28, 1888.

Six Living Generations.—Dr. R. B. Root, of Georgetown, Mass., writes as follows to the *Boston Med. and Surg. Jour.*, April 19, 1888:

"Last May I attended Mrs. Newall Rogers, of Byfield, aged sixteen years, with her first child. I was then informed, and I have since taken the pains to verify the statements then made, that this baby is the *sixth living generation*, with ages as follows: Great-great-great-grandmother, 95 years; great-great grandmother, 74 years; great-grandfather, 59 years, 8 months; grandfather, 39 years, 4 months; mother, 16 years, 2 months; child, 11 months.

"All the above are still living to this date."

Five Living Generations.—Dr. W. Channing, of Brookline, writes to the *Boston Med. and Surg Jour.*, April 26, 1888:

"I am happy to say that I, as one of that large and interesting class known as 'constant readers,' can produce an instance of five living generations, the fourth and fifth living in this town within a short distance of my house, and the three other generations all living in Natick. Their ages are as follows: Great-great-grandmother, 81 years; great-grandmother, 63 years; grandmother, 42 years; mother, 20 years; child, 5 months.

"The great-great-grandmother was married at 17; the great-grandmother at 19; the grandmother at 17, and the mother at 19."

MISCELLANEOUS.

Crosson (D. M.) on Anomalous Ducts of Exits from the Parotid Glands in Front of the Ear.—I was called to see the children of Mr. D., a very wealthy farmer, six miles distant in the country. I examined the children (four in number), and found that three of them have a small orifice on each side and just in front of the upper portion of the external ear, and that one has only one opening in front of the left ear, and that there is a continuous discharge going on through these orifices all the time. On close investigation, I diagnosed these openings to be mouths of small ducts leading from the parotid glands, and that, instead of the secretions being poured out through Steno's ducts at the proper place, they are discharged through these ducts externally, just in front of the external ear. Mr. D. has three children that have not this abnormality, but he has a brother-in-law (a brother to Mrs. D.), who has two children that have the like ducts discharging externally—making in all six cases, four males and two females, in the same family.

I find that whenever the excretions from the parotid glands through those ducts come in contact with the air, in very cold weather, and when the mouths of the ducts are not kept clear and open to give free exit to the glandular secretions, the secretions accumulate in the ducts and produce glandular irritation, and when opened externally, discharge a very purulent excretion. I opened up two of the ducts, in each of two of the children, which were blocked up, and these discharged considerably. I probed two of these ducts with a small silver probe, and found that they led directly into the parotid glands.

I advised the parents to keep the ducts open to give constant and free exit to the secretions, and they have no trouble when this is done; and the discharge when, constantly going on, is so small that it is seldom noticed when kept clean.—*Vir. Med. Mo.*, April, 1888.

Treatment of Suppuration Consecutive to Eye Traumatism.—Dr. Abadie, of Paris, says that the conjunctival surface is covered with microbes, and particularly its cul-de-sac. Out of 178 cultures practised with a little mucus from the superior conjunctival cul-de-sac, 139 produced vegetations, 39 remained nega-

tive. After any traumatism, and before resorting to an operation, one must make a sub-palpebral irrigation sufficiently strong to wash away mechanically all the microbes. The liquid used does not need to be irritant, it must only be aseptic. If, notwithstanding every precaution, he finds inoculation and suppuration at one point, as strong antiseptic solutions are not tolerated, he proceeds as follows: He touches lightly the centre of the purulent spot with the gavano-cautery at white heat, and he repeats these cauterizations every twelve hours. If the suppuration occurs after a cataract operation, the little cautery points are applied along the wound without extending over the neighboring tissue. Systematically repeated every twelve hours, they arrest completely the diseased condition, and often save the cornea from certain destruction.—*Med. News*, May 12, 1888.

Murphy (R. W.) on Strophanthus in Cardiac Dropsy.—An old lady, suffering from valvular disease and fatty degeneration of the heart, complicated with diffused dropsy of the lower extremities, had been under the "digitalis and convallaria" treatment for a considerable period, without apparently reaping any benefit whatever. I decided to give strophanthus a trial, and ordered five of the tabloids to be taken three times a day, which is equivalent to thirty drops during the twenty-four hours. The result was very satisfactory, the patient was most markedly relieved in a very short period, and although it is some time now since I treated this case, no return of the symptoms have been manifested.

I have since tried tincture of strophanthus in a case of valvular disease, combined with hepatic enlargement, with the following result: Dropsy of the legs, with some amount of ascites, completely disappeared within fourteen days. On this occasion I gave sulphate of magnesia and nitromuriatic acid in combination with the strophanthus. Digitalis and convallaria had been used for some considerable time, but had signally failed.—*Australasian Med. Gaz.*, March, 1888.

Gregory (E. H.) on Injury no Longer a Warrant for the Amputation of a Living Part.—Among other things the author says: "The surgery of to-day contemplates amputation most remotely; recognizes the possibility of primary amputation, but the wound inevitables which determine secondary and consecutive amputations are now anticipated and prevented. All that has been written about open fractured bones lying deep among lacerated muscles, suppuration progressive in character, dissecting of spaces involving medullary cavities and pus-bathed fragmentary tissue, has become obsolete—is remembered only as a fable."—*Weekly Med. Rev.*, May 5, 1888.

Hewel (F.) on Moist Heat after Operations for Senile Gangrene.—The author narrates a case of Lisfranc's amputation, and draws the following conclusions:

1st.—In an enfeebled subject the healing process is greatly assisted by artificially supplying moist heat to the part, thereby stimulating the capillary circulation from the outset. I think a poultice may bring about primary union and prevent phagedena.

2d.—In enfeebled subjects we can assist nature in nourishing skin grafts by stimulating the local capillary circulation through the agency of moist heat.

3d.—Skin grafts should be ¼ by ½ inch, if not larger, and should be applied freshly cut, directly to the freshened and bleeding surface of the wound, thus making use of the fibrin of the blood to secure the grafts in position.—*Internat. Jour. of Surg. and Antiseptics*, April, 1888.

Congenital Baldness.—Dr. F. Semeleder, of Mexico, reports the following: "A girl of twelve years was brought to me; when she was born she had only a few long hairs; soon they fell out, and no hair has ever grown since on her head. The head has not that shiny appearance of that of a bald man, but the skin is dry and looks like shagreen-leather. The girl has no other deformity. She has brothers and sisters, none of whom is bald, nor are her parents."—*Med. Record*, April 21, 1888.

Gehrung (E. C.) on Protracted Action of the Heart after Apparent Stillbirth in Partial Placenta Previa.—The patient, a pluripara, had been in labor since early in the morning, Nov. 15, 1887, and had with a head presentation placenta previa partialis; she had been bleeding all day and at 8 o'clock P. M. the labor pains, after constantly growing weaker, had ceased altogether for about two hours.

The patient, though of good physique, appeared anæmic and exhausted from loss

of blood and fruitless labor pains. It was decided to deliver immediately by version. I met with inconsiderable difficulty in introducing my left hand by the side of the right laterally implanted placenta, and, after rupturing the membranes high up, in catching and bringing down the feet. Despite all precautions the funis prolapsed, but the delivery was so rapidly effected that there was no cause to regret the prolapse.

Since there were little or no pains to assist in the delivery, I had some misgivings in regard to the rapid delivery of the after-coming head, but I was somewhat surprised at the facility and rapidity with which it was effected.

The child, a male, was apparently stillborn. Immediately after separation from the mother, it was placed in a hot-water bath, and the throat and mouth cleared by the finger, which seemed to be superfluous, as there was not the customary mucus present. The child's appearance was not that of cyanosis but of an extreme state of bloodlessness. Immediately Schultze's method of artificial respiration was practised, sometimes alternated with Sylvester's, flagellations, titillations of the larynx and pharynx, repeated immersions in hot water alternated with dashes of cold water. Mouth to mouth insufflation under the usual precautions was also practised, but like all the other means was of no avail. No effort at respiration was made by the child, nor was there at any time a sign of existing life observable, though from the birth to fully three quarters of an hour afterward, the heart was not only distinctly felt to beat, but the palpitations of this organ could be distinctly seen even from a distance of several feet by all the bystanders. When, despite all our efforts, the heart slowly ceased its convulsive jerks and came to a complete standstill, the child's appearance was that of a statue of marble, so white and bloodless was its surface. Not a single macula of cyanosis was visible anywhere. While practising the aforementioned efforts at resuscitation I asked the doctor to hand me a catheter to be introduced into the larynx for direct insufflation into the lungs, but the doctor objected on the ground that too much valuable time would be lost in effecting the introduction, and that in the relaxed state of the child the air would escape by the side of the instrument.

This case, in my opinion, is another plea for early delivery in cases of hemorrhage, and especially with placenta previa. Delivery, if possible, should be effected as soon as possible and before the mother and child are completely exsanguinated and the former exhausted. Could delivery have been accomplished an hour or two sooner, the child would probably have lived.

That the return of the heart's action after stillbirth is not always a sure sign of returning life, is here clearly demonstrated.

This case shows that without respiration and in a state of exsanguination the heart may continue to act as long as three quarters of an hour.

What should be done in similar cases I shall venture to suggest.

1. Since all the means that have been tried have so signally failed, I should certainly in a future case of this nature place my first reliance on the means omitted in this case, namely the catheter introduced into the larynx, through which the lungs may be filled with warm air, to be expelled again by compression of the thorax, and the process repeated at usual rate of respiration.

2. If I should have recourse again to Schultze's method, I would not, as the author directs, hold the child perpendicularly between my knees, and swing the lower extremities upon the abdomen, while the body is placed in a horizontal position, but, on the contrary, I would start by a horizontal position; and, by bringing the head downward let the lower extremities double on the abdomen in the inverted perpendicular position, so as to make all the remaining blood gravitate toward the nerve centres, by keeping the head constantly below the level of the body. By the inversion of the body the mucus possibly contained in the air passages will be made to flow out through the mouth and nose.

3. Transfusion naturally suggests itself, but in a child so young and so bloodless, even if every thing were ready for its performance, it would be very difficult, if not impossible, to find a vein.

In ordinary stillbirths from delay in labor, compression of the funis, etc., where the nerve centres are filled with venous blood, the heart's action is usually the first to cease and on arterialization of the blood the first to return,—the first symptom of returning life.

May I venture to say that the diminished blood supply and that sufficiently arterialized was the probable cause of the continued convulsions of the heart, even after the possibility of revivification of the other organs was lost beyond redemption, as may be seen among the lower animals?—*St. Louis Cour. Med.*, March, 1888.

Altdorfer (M.) on the Hot-Air Bath in Relation to Ptomaines and Leucomaines.—In the present state of our knowledge the author believes himself to be justified in holding the following views: 1. That the specific diseases (cancer included) are caused by some virus, either produced by bacteria, or by the cells of the body. 2. That the excessive production of these morbid substances may be counteracted by increased oxidation and elimination. 3. That the hot-air bath is the best method of increasing oxidation and elimination.—*Med. Press*, May 2, 1888.

Berry (J. T. B.) on Spontaneous Subsidence of Chronic Hydrocele.—P. E. N,, aged 65 years, farmer, habits temperate, general health good, applied for treatment for chronic hydrocele. He gave the following history: About four years ago he rode very fast, some distance, on horseback without any saddle. Soon after he began to feel sore as if his perineum was bruised.

About two months later a perineal abscess was developed, which was not opened, but suffered to go on to spontaneous rupture.

The abscess soon got well, but some enlargement and tenderness of one testicle followed.

This condition persisted without notable change for about twelve months, when the scrotum began to enlarge and tenderness to subside. He applied for treatment about four years from date of first injury and about three years from date that fluid began to accumulate. The tumor was about the size of a large cocoa-nut, and tension of skin very great. It was aspirated with small hypodermic needle and fluid found to be almost clear, but of a slightly yellow tinge.

The point of interest is in the fact that when I went to operate a few days later there was no tumor there. The tissues on that side the scrotum were considerably thickened, and that testicle somewhat enlarged, but the skin tension was gone, and a very relaxed condition instead. The scrotum about one fifth the size it had been a few days before. The patient, an intelligent gentleman, said there had never before been the slightest decrease in its size, that it had persistently grown larger and the tension greater.—*New Orleans Med. and Surg. Jour.*, May, 1888.

BOOK NOTICES.

The Three Ethical Codes.—Cloth, 55 pages. Postpaid, 50 cents. The Illustrated Medical Journal Co., Publishers, Detroit, Mich.

In this little book is reprinted the Code of Ethics of the American Medical Association, with its Constitution, By-Laws, and Ordinances, brought down to 1888; the Code of Ethics of the American Institute of Homœopathy; the Code of Ethics of the National Eclectic Medical Society. Of the three Codes, that of the American Medical Association is the longest, and that of the Eclectic Society is the shortest, while much of the Homœopathic is strikingly similar to that of the first named. Altogether, it is a handy little book for reference as occasions may require.

Lectures on Diseases of the Heart.—Delivered at the College of Physicians and Surgeons, New York.—By Alonzo Clark, M.D., LL.D. etc. E. B. Treat, New York, 1887, 8vo, pp. 246.

It seems not a little singular that a physician of such prominence in the profession as Dr. Clark should never have written a book until almost at the end of his long life. The little volume before us presents at last, in an attractive form, a book that we can put on our shelves with the name of Alonzo Clark on it as its author, to recall the teacher who has had his share in moulding so many who now are prominent in the profession. The book exhibits the lucidity, absence of pedantry, and frank recognition of the limits of our knowledge which characterized the great teacher, conscious of his strength.

In justice, however, to the memory of Dr. Clark, it should be recalled that the book is the child of his old age, and that nature had treated him as she treats all of us whom she allows to reach his years. We cannot lay down the volume without the wish that Dr. Clark had embodied in permanent form the lessons drawn from his great experience while still in his prime.

The portions of the book in which Dr. Clark speaks directly of what he himself has seen are full of vivid clinical pictures which are well worth preserving. As we finish the last article on the newest heart-tonic, we are apt to reflect whether we have added to our knowledge or only placed so many more fallacies in our way in the search for truth. After looking at Dr. Clark's sketches we realize that all is not vague speculation and doubtful deductions; that the foundations of our art are solid and grew most wondrously during the lifetime of the author, whose stately presence has only so recently passed from our midst forever.

R. VAN SANTVOORD.

May 15, 1888.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital.

VOL. V., NO. 22. May 31, 1888. WHOLE NO. 70.

CONTENTS.

	PAGE
Leading Article	257
Therapeutics	262
Medicine	267

LEADING ARTICLE.

Extra-Uterine Pregnancy.—The marked increase in the number of recorded cases of extra-uterine pregnancy shown during the past few years is evidence enough that the accident occurs much more commonly than formerly believed. Of late there may be found, in almost every issue of the better-known medical periodicals, one or more articles on the subject, with reports of new cases, and scarcely a meeting of the various obstetrical and gynæcological societies of the world can be held without a discussion on the management of this most interesting anomaly. In all probability the recent impetus given to abdominal surgery has served to bring to light the veritable nature of what twenty years ago would have been regarded as a pelvic hematocele, or relegated to the musty archives devoted to cases of sudden death from unknown causes. Or, as a result of more accurate knowledge of pelvic disease, and more perfect development of the gynæcological *tactus eruditus*, the condition has been recognized at a period of its existence when its power to harm is but slight, or when its malign influence may be averted by vigorous action, either before or after it has exerted its full strength. The difficulties which beset the way to a positive diagnosis of misplaced gestation before—or, indeed, after—rupture of the fœtal sac, the conflicting opinions of authorities as to its pathology and treatment, and the mystery in which its etiology is shrouded,—all tend to powerfully excite the interest of the mind medical, and therefore a brief account of the present status of the subject, as drawn from the expressed opinions of authorities, will not be out of place.

For all practical purposes, without taking into consideration the original situation occupied by the ovum, the varieties of extra-uterine pregnancy may be considered as but two in number—tubal and ventral. The former class includes tubal gestation proper, the tubo-ovarian, tubo-abdominal, and tubo-uterine varieties, as well as the ovarian form, of which the existence has not been demonstrated to the satisfaction of all observers. But even if its claims to full recognition be granted, it could scarcely be distinguished from the tubal form; and, moreover, identical indications for treatment would be offered by both.

Ventral pregnancy comprises all those cases of gestation within the peritoneal cavity or between the layers of the broad ligament, whether such location be congenital or acquired. Some such general classification, while not scientifically accurate, is necessary for a practical consideration of the subject, and though some authorities, notably Tait, deny the possible existence of an ectopic gestation not primarily tubal, and others whose opinions are entitled to fully as much respect, contend that both ovarian and primary ventral pregnancy are established entities, their controversy has no practical bearing on the question, extant in the mind of every practitioner, of how he may detect and successfully treat this abnormal condition. The lines of treatment of the two varieties are sharply defined, and while it may be interesting, and pathologically delightful, to make wire-drawn distinctions,

and beg the question which is of such vital importance by deftly splitting hairs rather than exercising the ingenuity in devising some homely, every-day method of extracting the kernel of the nut without a complete annihilation of the shell, it in no wise affects the practical solution of the problem.

There is but one theory as to etiology of misplaced fœtation which deserves mention—that of Tait. He advances the rather unique view that the chief function of the cilia found in the tube is to prevent the access of spermatozoa to the ovum before the latter reaches the uterine cavity, and hence tubal gestation, or even impregnation, is impossible, save in those cases in which the cilia have been removed by inflammatory action. Salpingitis, then, he regards as the key to the mystery, for he also denies that any structure, save the mucous membrane lining the tubes and the uterine cavity, is capable of affording a safe asylum for a homeless ovum, astray in a foreign land.

An abnormal attachment being once acquired, the subsequent behavior of the ovum will depend on the location of its adopted home. The uterus increases in size, developing a decidual membrane resembling that of normal gestation, expelling it, after a short time, either *en masse* or in shreds which may escape notice. The fœtal sac also grows, until the increase in size of the fœtus is too great for the strength of its containing sac, which ruptures, either into the peritoneal cavity or into the broad ligament. The course of a tubal pregnancy is usually terminated in this manner within the first three months of its progress, though in cases of tubo-uterine gestation, the fœtus has been expelled into the uterine cavity, where it it has continued its development or been subsequently thrown off as a miscarriage. In rare instances, the tube withstands the force exerted by the fœtal growth, and the pregnancy advances to or beyond term. The time at which rupture is most prone to occur ranges from the sixth to the sixteenth week of gestation, and this danger is most imminent during the third month. Should the sac rupture into the peritoneal cavity, quickly fatal hemorrhage, hematocele, or continued gestation with the fœtus in the peritoneal cavity may result. If the rupture be between the folds of the broad ligament, fatal hemorrhage is rare, if the folds do not give and allow the blood to flow into the peritoneal cavity, and again an hematocele or continued gestation occurs. In either case, if development is not corrected, the placenta contracts adhesions with other viscera or the abdominal walls as it grows. A large number of those cases regarded as true ventral pregnancy are unquestionably of this extra-peritoneal variety —the *sous-péritoné-palvienne* of Dezeimise's —and, according to Tait, almost all are of this nature. At term, false labor usually occurs, and if there be no interference at the time, death of the child soon occurs, and nature employs several methods of making the best of a bad situation. The fœtus may be encysted, undergo calcareous degeneration, or the sac only be affected by the same process; it may become putrid and cause septicæmia, or an abscess, which in time may rupture into the intestine, uterus, bladder, vagina, or through the abdominal wall, with discharge of the bones and other remains of the original tenant of the sac. The nutrition of the fœtus is bad as compared with that of the normal form of gestation, and those children who have been extracted while still living, and sufficiently developed to render their chances for subsequent life and growth excellent, have, with but few exceptions, died of marasmus or one of the more innocuous diseases of infancy.

In the investigation of the symptomatology of ectopic gestation, one is met at the very outset with a curious paradox. Here is an abnormal and perverted variation of a physiological process, almost invariably following a long period of sterility, and presenting all the early symptoms of pregnancy; marked by most striking and almost pathognomonic symptoms after the lapse of a few weeks; often, if not always associated with physical signs of an unequivocal character,—and yet the diagnosis is rarely made until it is too late to prevent the accident which gives to the condition all its terrors, not from lack of diagnostic skill on the part of the physician, not because science is barren of means of succor, but simply because a complete unbroken chain of symptoms, insignificant when isolated, is necessary to a diagnosis. If every woman, who had reason to believe herself pregnant, would consult a competent physician at intervals during the first four months of gestation, the long record of unsuspected cases and missed opportunities for averting a fatal issue, would soon

be filed away on a dusty top shelf, and pass from the sight and memory of all save the antiquarian. Even the sign considered as pathognomonic of the condition, may often serve to entirely neutralize the evidence offered by the other symptoms,—the expulsion of a decidual membrane from the uterus, which, if it escapes *en masse*, will so closely resemble an abortion that any suspicion excited by previous symptoms is quickly allayed, especially when the membrane is not submitted to the physician for inspection, and he has only the history of recent miscarriage to help him when called upon to make a diagnosis. Therefore, positive diagnosis at an early period is possible only under the most favorable circumstances, and as by far the greater number of cases are not seen before the rupture of the sac, it is not strange that controversy as to treatment and a high percentage of mortality should prevail. So uncommon are the instances of early diagnosis, that Tait doubts the possibility of any thing but a shrewd guess being made; but as he has seen but one case before rupture, and that of a most obscure nature, his opinion, so bluntly expressed, is not entitled to the consideration granted to his other teachings in regard to treatment. Diagnosis has been made as early as the sixth week, and subsequently confirmed; and, moreover, made as a logical deduction from careful examination of signs and symptoms. The diagnosis is often erroneous, undoubtedly, for man is not infallible; but correct conclusions are now growing more and more common, as experience and knowledge increase.

Ventral pregnancy may give no noticeable signs of an abnormal nature until the end of gestation, when the occurrence of false labor reveals the truth. It often, however, has been marked by the occurrence of the characteristic griping pains of the tubal form, and sometimes with undoubted signs of rupture, not interrupting the subsequent progress of gestation. After the fœtus has reached the period of viability, the diagnosis is more easily made; but in the last three months, before the attempt at labor, it is by no means an easy matter to detect its presence. The chief point of diagnostic value at this time is the notable failure of the vicarious uterus to exhibit the rhythmic contractions usually perceptible by the hand when the pregnant uterus is palpated. Such contractions can never be produced in the sac walls of an ectopic pregnancy, and their absence should always excite grave suspicions and a most thorough and minute investigation, which might warrant the passage of a sound into the uterine cavity. This would be a crucial test, for the uterus is never enlarged to a degree corresponding to the period of gestation after the fourth month. To sum up, the diagnostic symptoms presented by tubal pregnancy are, in regular sequence: ordinary early symptoms of pregnancy in a woman, nulliparous or for some time sterile, followed during the first eight weeks by sudden, violent spasmodic attacks of colicky pains in the hypogastrium, preceded or followed by a bloody discharge from the uterus, and the expulsion of shreds of, or a complete, decidual membrane. The pains vary in severity and frequency of occurrence, and usually are accompanied with severe shock, or even collapse, when rupture occurs. According to Janvrin, they are caused by rupture of small vessels in the cyst wall, causing greater or less hemorrhage and laceration of the peritoneal covering of the sac, and consequent injury to nerve filaments. If examination reveals the presence of a septic tumor in the pelvis, in the ovarian region, tender, rapidly growing, displacing the uterus forward or to one side, and evincing great vascularity, the evidence in favor of the existence of tubal pregnancy is irresistible. Rupture of the sac is charactericed by sudden, intense pain, rapidly followed by severe shock and all the signs of extensive hemorrhage. The placental bruit and fœtal heart sound are abnormally distinct and in an unusual location, as the pregnancy advances. The abdominal enlargement is more marked on one side; the cervix does not show the changes noted in ordinary gestation, nor does the uterus enlarge in proportion to the advance of the fœtal development. The organ can often be differentiated from the sac, and found displaced and adherent to it. In such case, passage of a sound will remove all doubt as to the diagnosis. Although, as has been already said, it is not an easy matter to positively recognize the condition, there is every reason to hope that in the future increased knowledge on the part of the physician and education of the laity as to the prevalence of extra-uterine gestation will together result in early diagnosis and successful treatment.

The all-important question of treatment

is one now exciting great discussion and fierce conflict among gynæcologists. It has been reduced to the condensed form of either laparotomy or employment of electricity in all cases of tubal pregnancy prior to rupture of the sac. After rupture, or in ventral pregnancy, little or no difference of opinion exists, all authorities favoring abdominal section unless some special contra-indication exists. But the management of tubal gestation during the first four months of its existence, prior to rupture, must be, at the present time, either by conservative use of electricity to destroy the life of the fœtus and thus terminate the growth of the sac, or radical laparotomy and removal of the mass as soon as the diagnosis is reasonably certain. The other propositions of puncture of the sac, injection of narcotics into its cavity, opening and draining, or removal by the vaginal section, and simply letting it alone, have so small a number of supporters that they may be ignored in this paper, and, therefore, only the claims of the two principal methods of treatment will be considered.

Those advocating the electrical treatment claim for it the following advantages: that its use in no wise endangers life; that it has been almost uniformly successful in arresting the growth of the cyst and preventing the fatal result which may be expected if the cure be left to nature; that no surgical ability, experience, or facilities for operation are needed, and therefore it is available under all conditions to the general practitioner; and finally, that even if rupture be not prevented, laparotomy may still be employed after every chance of relief has been given the patient.

On the other hand, the champions of the operative treatment agree that the electrical treatment is uncertain, and the death of the embryo does not necessarily arrest the growth of the cyst; that the lack of proof as to the accuracy of diagnosis renders the claim of good results exceedingly questionable; that abdominal section for other conditions has given such brilliant results that the danger is slight as compared with that of dallying with a condition which threatens death at any moment, by the use of uncertain treatment; that no tumor of unknown nature or irritating tendency is left in the abdomen, as a possible cause for subsequent suppuration or septic infection; that the exact condition is definitely ascertained by the operation, and thus no anxiety as to future behavior of the tumor can exist; that waiting for rupture to occur is unscientific, and most unjust to both patient and surgeon; and finally, that even if the operation be performed pursuant to an erroneous diagnosis, a tumor will be found which should be removed, or its character investigated.

As yet, no conclusion can be reached as to the comparative value of these rival methods, as the statistics of each are too meagre for the utilization of the "deadly parallel" as evidence from which one may be drawn. Brothers, of New York, has collected forty-three cases of extra-uterine pregnancy treated by electricity, with but two deaths—one from rupture of a vessel in the cyst wall, and one in which the treatment was abandoned and puncture of the sac *per vaginam* was followed by death from hemorrhage. This secondary operation, performed five weeks after the electrical treatment had been discontinued, can be justly considered the actual cause of the fatal result; and therefore the statistics should read forty-two cases with one death—a mortality of less than two per cent.—a most excellent showing in favor of this plan of treatment.

Since this report, Kletzsch, of New York, has reported a case in which an early diagnosis was made and faradization employed. During the treatment symptoms of hemorrhage occurred, followed by those of septic infection. The patient, however, who had been operated upon some years since for ventral pregnancy, finally recovered, and the mass in the pelvis has almost disappeared.

On the other hand, the results of early laparotomy before rupture or serious hemorrhage has occurred, are unexceptionable. But two cases are on record—one by Dr. Joseph Price, of Philadelphia, and the other by the writer. In each, the sac was removed intact, no special difficulty was encountered in the operation, and the patient made a good recovery. No reasons for dread of serious complications or fatal results, other than those commonly attendant on abdominal section for other conditions, were apparent. No statistical value can be set on the result of analysis of two cases, but no question as to their true nature can be raised. In the writer's case, the diagnosis was positive, and was made forty-eight hours before operation. Rup-

ture was thought to be imminent, as the sac had been of rapid development, and showed a marked increase of tension of its wall within a day's time. The fœtus showed a development of not more than six weeks' progress; the last sexual intercourse was had nine or ten weeks previously; the symptoms of gestation were of twelve weeks' standing; and to the writer's positive knowledge, the sac had quadrupled in size during the four weeks preceding operation. The death of the fœtus, then, had occurred at least three or four weeks previous to its removal—in all probability five or six weeks. Electricity, employed in this case, would have been powerless to prevent rupture, unless, as has been claimed, it not only destroys the life of the fœtus, but modifies the circulation and nutrition of the placenta and sac wall, though evidence, other than inferential, is entirely lacking in support of such theory.

The treatment by electricity—galvanism, faradism, franklinism, and electro-puncture of the sac—has found but few supporters save in America, where the prevailing opinion among gynæcologists is in favor of its use up to the fourth month. Thomas, Lusk, Mundé, and a number of other authorities, are its advocates, Garrigues even advising its use after the viable period has been reached. On the other hand, Janvrin, who had lost one case from rupture of an artery in the cyst wall, during treatment by galvanism, has for the last two years strenuously advocated removal of the sac by laparotomy—standing almost alone among American gynæcologists in this matter. Abroad, Tait, Edis, and a few others in Great Britain, and Martin in Germany, strongly favor operative measures as soon as the diagnosis is made.

Electricity is used in all its forms. Galvanism is performed by electro-therapeutists as more fatal to fœtal life, more capable of measurement as to amount and force, and as less apt to cause contractions in the cyst wall than the induced current. The latter, however, has been the favorite with the majority of those who have used electricity, the strength of the current by the sensations of the patient. Electro-puncture is now condemned by the majority of authorities, with the exception of Apostoli, of Paris, as too dangerous a method to figure as a conservative mode of treatment. Static electricity was used in one case. One electrode is introduced into the vagina and pressed against the cyst, and the other,—a broad plate covered with moist cotton, sponge, or fuller's earth,—on the abdomen. With galvanism, interruptions are made, and a current of from fifteen to thirty milliampères employed; with faradism as strong a current as the patient can bear. Sittings are repeated at intervals of one to three days until softening and decrease in the size of the cyst are noticed.

Laparotomy in no manner differs from the ordinary operation for removal of the uterine appendages. Drainage is usually indicated as the cyst, except at a very early period, contracts adhesions to the abdominal viscera.

Elytrotomy, either for removal of the cyst or drainage, is not at all favored, as it is fully as dangerous as laparotomy, and probably much more so, and is much less certain and convenient than the latter.

The treatment indicated at the time of rupture, admits of no discussion. The case must be either left to nature, or the hemorrhage arrested by abdominal section and ligation of the bleeding vessels. Tait, with an experience of 36 cases, upon whom he operated at the time of or soon after the rupture, with 34 recoveries, recommends that all adhesions be separated with rapidity and disregard of bleeding, until the broad ligament can be ligated, when the mass can be removed. The peritoneal cavity can then be cleansed of blood by irrigation, and drainage employed, after all oozing has been stopped by the application of solid perchloride of iron. Martin advises removal of the entire mass if possible, or, if not, of as much of the sac as can be cut away, and then shutting off the communication of its cavity with that of the peritoneum by closing it with sutures, after passing a drainage-tube into the vagina through its wall and the cul-de-sac of Douglas.

In case the child has reached the viable period, the general opinion is against operation—unless special reasons demand action,—as it is held that the life of the child should be considered, and saved if possible. It may be removed at term, if alive; otherwise it is best to wait until the placental circulation becomes less active, and therefore less apt to cause dangerous hemorrhage when removed. Symptoms of septic infection, however, demand

immediate interference. The management of the placenta when laparotomy has been performed is a question of much moment. The prevailing idea, at present, is to avoid disturbing its attachments, unless these be such as may be easily ligated and separated without hemorrhage, but allow it to become detached by sloughing, and discharged piecemeal by drainage of the sac, the edges of which have been stitched to the abdominal wound. Tait and Martin, however, remove it, and, thus far, with success. The former practice seems to invite septicæmia, but if hemorrhage does occur, it is usually most profuse, and not easily controlled.

In the case of suppuration of the sac after spontaneous opening, the indications for treatment do not differ from those presented by any abscess in the same locality. The cavity should be cleaned out and drained. If encapsulation or a lithopædion results, no treatment is demanded, unless manifestations of irritation or interference with other contents of abdominal cavity are present.

Vaginal incision may be preferable to abdominal section under certain conditions, after the death of the child, as when its position in the pelvis is such as to be easily reached and delivered; but the great weight of opinion is in favor of laparotomy as the proper procedure in all cases demanding operative interference.

J. S. HAWLEY, M.D.

THERAPEUTICS.

Boxall (Robert) on the Chemical Incompatibility of Antiseptic Agents.—I have selected five of the more important antiseptic agents in general use, and, for reference as to the incompatibilities of each, the results of experiments are presented, showing the action not only of these agents on one another, but also of certain lubricants with which they are frequently combined and brought into contact, and of soap with which they are apt to be contaminated in the process of washing and disinfecting the hands and instruments.

In view of the practical utility of these observations, the experiments were made, not with concentrated materials, but with solutions of the strengths usually employed in practice, and were carried out at temperatures not exceeding that of the body.

The solutions were

1. Corrosive sublimate solution (perchloride of mercury).
2. Carbolic solution (phenol.).
3. Iodine solution (iodine and iodide of potassium).
4. Salicylic solution (salicylic acid).
5. Condy's fluid (permanganate of potassium).

The following incompatibilities were observed:

1. *Corrosive Sublimate and Iodine.*—No precipitate of mercuric iodide is at any stage of the admixture formed. A small addition of sublimate solution fixes the free iodine, as may be seen by the immediate bleaching of the iodine solution, and confirmed by the subsequent addition of starch-paste, which produces no blue coloration. One part by volume of sublimate solution (1 in 1,000) is just sufficient to fix the whole of the free iodine in 4 parts by volume of iodine solution.

2. *Corrosive Sublimate and Soap.*—An insoluble soap is produced even when a neutral soap solution is used. This is of special importance in consideration of the small admixture of soap which is required to throw down the whole of the mercury from solutions of the strength usually employed.

3. *Carbolic and Iodine.*—An exceedingly small admixture with phenol is sufficient to fix the whole of the free iodine as in (1). One part by volume of carbolic solution (1 in 20) removes the whole of the free iodine from 2,000 parts by volume of iodine solution of the strength indicated above.

4. *Carbolic and Condy.*—This is perhaps the most generally recognized of these incompatibles. Admixture with phenol immediately turns permanganate brown.

5. *Carbolic and Olive Oil.*—This is of importance and special interest when taken in conjunction with the researches of Koch, of Berlin, who has shown that bacillus spores are capable of living and developing after having been immersed in carbolized oil (1 in 20) for 4 months. The oil appears to enter into some combination with and to fix the phenol. If a drop of tr. ferri perchlor. be shaken up in a test tube with carbolized oil (1 in 20) no change is found to be produced in the iron as it gravitates to the bottom. Moreover, if carbolized oil be shaken up with a few drops of water, the water allowed to separate out at the bottom of the tube, and a drop of iron solution conveyed into it, the characertistic

purple coloration with phenol is not produced unless the shaking has been very prolonged and energetic, and then only to a slight degree. By strongly heating the carbolized oil, phenol is again set free, and the above reaction can then be obtained.

6. *Iodine and Soap.*—No action is produced by a neutral soap solution, but ordinary soap, which contains an excess of alkali, at once removes the free iodine.

7. *Salicylic Acid and Condy.*—A very dilute salicylic acid solution (1 in 800) slowly removes the color from permanganate.

8. *Salicylic Acid and Soap.*—A drop of dilute salicylic acid solution gives a white precipitate even when a neutral soap solution is employed.

9. *Condy and Olive Oil.*—When permanganate solution is shaken up with olive oil its violet color is changed to brown.

10. *Condy and Glycerine.* — When permanganate solution is added to glycerine its color slowly changes.

11. *Condy and Soap.*—This incompatibility is also generally recognized. Soap, even when a neutral solution is employed, readily turns permanganate brown.

I do not pretend to any precise knowledge of the bodies produced, some of which may, for all I know, possess powerful antiseptic qualities. But until this point is settled by direct observation, when chemical incompatibility exists, the antiseptic properties of the original solution must be regarded as weakened, if not wholly destroyed.

The moral conveyed by the above experiments is obvious: avoid as far as possible the admixture of antiseptic agents, and their contamination with lubricants and with soap when incompatibility exists. For instance, in employing corrosive sublimate, it is advisable to use the same solution for disinfecting the hands (carefully avoiding contamination with soap) and for cleansing instruments[1] as for irrigating the parts, to employ a mercurialized lubricant, and to use alembroth dressings. If for any reason it becomes requisite to substitute one antiseptic agent for another, a second should be chosen which is not incompatible with the first, and the same precautions should be observed throughout the series.—*Brit. Med. Jour.*, April 28, 1888.

[1] Here, again, a caution is requisite, for copper and steel, unless nickel-plated, are apt to decompose the solution and to cause precipitation of the mercury in a free state.

A Case of Corrosive Sublimate Poisoning.—An anonymous writer reports the following case:

On March 14th last, we were called to see Mrs. X., who was suffering with a violent hemorrhage.

Having called a friend in consultation a fœtus was soon delivered, about two and a half or three months of age, with some indications of putrefaction. Hemorrhage was intense, and the adherent placenta was delivered mechanically by the consulting physician.

During the night she rested well, notwithstanding she had fever several days with a slight rigor occasionally. On the following morning she had a very severe rigor followed by high temperature, the rigors increasing day after day in frequency and intensity. With the first rigor we began the sublimate injections, using the solution of the strength of 1 to 1,000 from two to six times daily, with large doses of quinia, ergot, salicylic acid and chlor. ammonia internally, with sulph. morphia as necessary and veratrum, aconite, and digitalis, and later on an occasional dose of antipyrine, which seemed to act nicely in bringing about a normal temperature, return of consciousness, and, in my opinion, abridging the paroxysms and diminishing to a marked degree their frequency—its efficacy not being fully tested, having given her only a few doses as necessary to relieve nervousness and delirium.

After the second or third injection into the uterine cavity of *sublimate solution*, there formed upon the uterine neck, the vaginal walls, as well as the walls of both anterior and posterior cul-de-sac, a white and thick diphtheritic membrane which entirely obscured from view the meatus urinarius, through which a catheter could be introduced only by force. The vaginal walls became tightly contracted, forming great folds, making it an impossibility to introduce the finger without great pain, even following the injection of olive oil to first lubricate the surface, and making it difficult to continue other antiseptics until the use of the sublimate was deferred sufficiently long for the diphtheritic membrane to become detached and come away, when the surface invariably assumed a healthier appearance. During this time the rigors increased in frequency and severity, re-

sembling pyæmia more than septicæmia, without the formation of any abscesses; but some time before death we discovered that her mouth and gums especially were badly swollen, dark-red, and spongy; an enlargement beginning about the maxillary tuberosity, extending over the entire zygomatic surface, eventually assuming enormous proportions, showing conclusively that the sublimate solution certainly exerted a powerful and poisonous influence in this particular case. The liver became enlarged and solidified, the lungs inflamed with a terrible cough, and the expectoration of large pieces of dark lung tissue, and peritonitis set in.—*New Orleans Med. and Surg. Jour.*, May, 1888.

[It is almost unnecessary to say that the sublimate solution in this case was used too freely and too strong.—ED.]

Stevens (C. W.) on Corrosive Sublimate Internally in Puerperal and Other Septicæmias.—My initial dose of corrosive sublimate is $\frac{1}{48}$ grain, and if any looseness of the bowels supervenes, I diminish it to $\frac{1}{96}$. If there be a tendency to too frequent dejections, the bichloride can be guarded by an opiate. I have never had any sore mouth nor any unfavorable symptoms except a slight relaxation of the bowels, which was relieved by diminishing the dose.

In connection with the internal use of bichloride, it may be used as injection; but I believe the cases of poisoning have been due to a too large dose. I have used in the uterus 1:5000 and in the vagina 1:3000. I have the nurse wring a napkin out of lukewarm 1:2000 solution and apply it moist, as a pad; it gives great comfort.

There are certain cases of mercurial idiosyncrasy in which it is better to use injections of liquor sodæ chlorinat. or of permang. potassæ, the latter of which I have used several times with satisfaction.

In cases in which chill or uterine colic follows intra-uterine injections, I think crayons or suppositories of iodol are excellent. Apart from its dangerous poisonous properties, iodoform masks the lochial odor, which is a great disadvantage. Iodol, although having nearly the same per cent. of iodine, appears to be innocuous, and is excellent in suppurating substances.

CASE 1.—Mrs. R., æt. eighteen, primipara, was confined by me Nov. 14, 1887, of a still-born child at term. I was obliged to use forceps on account of incompetency of uterine contractions and exhaustion of patient. There was no rupture of perineum, and but a slight unilateral laceration of cervix. She rallied well from the operation. Her lochia were very scanty from the beginning. There was no trouble with the milk secretion. She seemed to get along in a normal manner, and complained of nothing until Nov. 23d, or the ninth day, when she was taken with rigor or fever. The next day I found in the morning pulse 108, temperature 103° F. Severe frontal headache, nausea, and fetor of the lochia. No tympanitis nor diarrhœa, and only slight tenderness over the uterus and right ovary. I ordered her 18 gr. quinine and injected into the uterus a 1:60 sol. carbolic acid by means of a reflux tube. A few minutes after the injection she had a severe rigor, which lasted half an hour. The next day the pulse was 100, temperature 103°. I now injected a 1:2000 hot bichloride sol., and applied tinct. iodine over hypogastrium. A few minutes after the injection she had a bad and long rigor, and became much alarmed.

The following morning her temperature had gone up to 104°, and she found it impossible to turn over on account of soreness. The injections had evidently caused shock, and had not relieved her in any way; in fact she was worse. I now prescribed corrosive sublimate gr. $\frac{1}{48}$ every two hours. The next morning the temperature had fallen to 100.5° and the pulse to 92. She felt much better and less sore. I now gave her a vaginal injection of 1:2000 bichloride daily, and continued the same internally until the sixth day of the septicæmia, when she became convalescent.

CASE 2 is that of a four-month abortion in which septicæmia ensued from retained placenta. I removed it, washed out the uterus with permanganate of potass., and gave bichloride internally with beneficial effect.

CASE 3.—Puerperal peritonitis of a severe type, with bad sanitary surroundings in a gypsy-crowded tenement. The bichloride caused a fall of temperature, and was beneficial. Recovery. My cases uniformly show a diminution of temperature after its use, and generally very quickly.—*Jour. Am. Med. Ass'n*, May 19, 1888.

Camphorated Carbolic Acid.—In the *Correspondenzblatt für Schweizer Aerzte*, No. 7, 1888, p. 229, Dr. Th. Schneider, of Basle, recommends camphorated carbolic

acid as an "elegant, reliable, and very convenient antiseptic preparation." As is well known, when one part of crystallized carbolic acid and three parts of powdered camphor are shaken up together in a test-tube, a colorless limpid fluid is produced. This mixture does not possess either the characteristic odor or the rubefacient and caustic properties of carbolic acid, while the antiseptic power of the latter remains intact. When placed on the tongue the compound causes but a very slight burning sensation. It has no effect on polished steel.—*Brit. Med. Jour.*, May 12, 1888.

Gaston (J. McF.) on a Case of Snake-Bite in Atlanta, Ga., Treated by Injection of Permanganate of Potash.—On the 27th of the month, Mr. M. B. S., who works at the Southern Express office, was bitten by a rattlesnake that lay concealed in a crate of cabbages. The cabbages were shipped from Jacksonville, Florida, and Mr. S. was moving them preparatory to their delivery to a commission merchant. As he placed his hand on the crate he felt a stinging sensation in one of his fingers, and saw that a huge snake had fastened its fangs in his flesh. In a few seconds the hand and arm began to swell, and he was brought to my office. On examination I found that the fang of the snake had penetrated the anterior portion of the end of the third finger, and a ligature was tied tightly around the finger below the first joint immediately, which strangulated the circulation. The patient came directly to my office, only a few blocks off, and so soon as a solution of permanganate of potash, grs. ii. in distilled water, f. 3 i., could be made by the druggists nearest to me, the quantity contained in an ordinary hypodermic syringe was injected, by passing the needle through the orifice left by the fang. The ligature was then released, and the patient made great complaint of the pain in the part, from the medication, for a few minutes. There was a dusky ashy hue extending around the point where the injection penetrated, which gradually passed away, and in course of fifteen minutes there was no further notable effect of the bite or of the injection. Some swelling of the finger and arm occurred during the following day, as I was told by his brother, who came to report his condition; but it was not requisite for me to see him again. I should state that he took the aqua ammonia in doses of fifteen drops every hour during the afternoon of the bite, but there were no indications of the effects of the poison requiring this remedy, and it was only used from prudential considerations.—*Brooklyn Med. Jour.*, May, 1888.

Hare (H. A.) and Leidy (J., Jr.) on the Influence of Etherization on the Normal Bodily Temperature with Reference to the Use of External Heat.—The common custom of surgeons the world over of applying heat to the body and limbs of a patient who has just passed through an operation is so universally recognized that it needs no word of encouragement.

We have experimentally determined that it is possible to lower the normal rectal temperature of the dog as much as from 8° to 10° Fahr. by continuous etherization for an hour, giving two drachms of ether every five minutes after the animal has been put thoroughly under the anæsthetic influence. If a fall of temperature proportionate to this takes place in the human being, the present custom of applying heat to the patient is closely allied to locking the door after the horse is stolen, and the results of our investigations seem at least to afford sufficient evidence of the propriety of using external heat not after but *during* anæsthesia.

In a series of 13 cases operated on for different diseases, the average fall of axillary temperature was over 2½° Fahr., the greatest fall being 4.4° Fahr., the least 1.2° Fahr.

In another series of 13 cases the average fall of temperature was 2.32° Fahr.; greatest fall, after operation for carcinoma of breast, 3.15° Fahr.; the least, .8° Fahr., after insertion of drainage-tube for empyema.

The records of these twenty-six operations, point very conclusively to the fact that during anæsthesia the bodily temperature invariably falls to a considerable extent. The question has been raised as to whether the ether or the operation is responsible for this, and probably both are factors in the fall. That simple etherization may lower temperature is, however, most certain.

It has been claimed that the chilling so commonly found after etherization is due, at the present day, rather to the profuse irrigation with antiseptic washes than the ether.

That this is not the chief cause, however, is proved by the fact that the quantity of irrigation has absolutely nothing to do with the fall. Thus, in one case where the amount of irrigation was enormous, the temperature fell but slightly, while in another instance, with no irrigation of any amount, the temperature fell most decidedly. If the patient lies in a pool of bichloride solution, from which his clothes rapidly become saturated with water, of course the dissipation of heat is enormous, but the mere running of a solution through a superficial wound, in distinction to a body cavity, does not lower the temperature to any appreciable extent.

Practically, the fact that the operation aids in producing the fall influences in no way the importance of the use of heat; experimentally, the question as to the exact effect of the ether and operative shock is of course more important. The shock which an operation in a body cavity produces is of course greater, as a rule, than that caused by an operation on an extremity, but it seems probable that quite as much credit is given to this factor as it deserves, for it should be remembered that when under the full influence of the anæsthetic, the centric nervous system is incapable of recognizing injury to its tributary parts.

The cause of the fall may, therefore, be considered chiefly due to the anæsthetic; and, secondly, to the operation. The manner in which the anæsthetic acts is, of course, unknown. It may affect the nervous centres, governing heat production and dissipation, or simply by its effect on the circulation and its evaporation influence the temperature. The former seems the more probable, but the latter must certainly also be a factor.—*Therap. Gazette*, May, 1888.

Lanphear (E.) on a Peculiar Effect of Antipyrine.—Mrs. C——, aged 52, has been under my care for two or three years, having first come under my observation when suffering from dementia, following the menopause. She has tertiary syphilis, and for some weeks took as high as 400 grains daily of potassium; but, apparently regaining her health, contrary to my advice she discontinued its use. For some months she had perfect immunity from all troubles, except an occasional attack of dyspnœa, probably due to aortic stenosis, the latter condition being quite marked, but finally the old pains returned in the tibiæ and ulnæ, at last becoming so severe as to render sleep impossible, and necessitating her walking the floor continually and crying. She had for a time received much comfort from the refilling of a prescription I once gave her for her pains:

℞ Sodii salicylatis . . . . ʒ iij.
Syrupi simplicis,
Aquæ pur. . . . . āā f ℥ j.
Olei gaultheriæ . . . . f ʒ ss.
Misce. Sig.—Teaspoonful as often as needed.

But it ceased to have any effect in controlling pain after a few days. Therefore I was again called in. While waiting to receive relief from specific treatment, I had to give something to relieve her pain. She had once been addicted to the morphine habit, of which I had cured her; so I had to find something else. After exhausting the usual drugs—bromides, cannabis Indica, hyoscyamus, etc., I gave her

℞ Antipyrin . . . . . ↄvj.
Div. in pulves vi.
Sig.—One every two or three hours until relieved.

Inadvertently I omitted my usual note at the bottom of such a prescription, "Not to be refilled," and, being compelled by press of business to miss visits to her for several days, I found that she had had the same prescription refilled some four or five times in as many days. She had thus taken nearly or quite one and one half ounces of antipyrine inside of a week, and had virtually become a subject of the "antipyrine habit." Possibly, had there been no organic lesion of the heart, no distressing symptom would have arisen; but, as it was, she was purple, her lips swollen and black, and her face and extremities "puffed up" to an amazing extent. The drug had ceased to have any analgesic effect, and, of course, was promptly discontinued. She was placed upon digitalis and quinine (having a temperature of 100° F.), and in a day or two was in a normal condition.

That this extraordinary effect (she having never been thus affected previously) was due to antipyrine was demonstrated to my satisfaction by this fact: She again resorted to the same drug in a few days, during my absence, and was soon in the same alarming state, from which she promptly recovered upon withdrawal of the drug and the substitution of digitalis and quinine, as before.

I have not hesitated to give antipyrine

to control pain where morphine cannot be given, in cases complicated by organic diseases, where I can carefully watch the effects of the first few doses, and this is my first case where alarming symptoms have arisen. I feel certain that it would have also been well borne by her had she not taken it in such inordinate quantities. The wonder is that the result was not a fatal one.—*Kansas City Med. Index*, April, 1888.

MEDICINE.

Lloyd (J. H.) on a Case of Rapidly Fatal Exophthalmic Goitre.—On August 12th the author was summoned to a case which was described as cholera morbus. The patient was a single woman, aged thirty-nine, who had been suffering for some hours with diarrhœa and vomiting. Pulv. opii and plumbi acetat. were prescribed. On the following day the diarrhœa was checked, but obstinate, persistent vomiting continued. This vomiting was quite remarkable, allowing not a morsel of food or even a small quantity of water to remain on the stomach. A careful physical examination failed to detect any direct cause for this. There was a slight tenderness in the epigastrium, but no hardness or evidence of any growth; no enlargement of the liver or spleen; no evidence of hernia; no abdominal pain, or any tympanites. A very marked derangement of the vascular system was, however, detected. The whole abdominal aorta to its bifurcation was throbbing intensely, with a pulsation somewhat expansile. The heart's action was rapid, but there was no intracardial murmur. It was now observed that the patient's eyes were very prominent and staring, which symptom had escaped observation at the first visit on the preceding evening (possibly due to the poor light in the room). Further examination revealed a much enlarged and rather soft thyroid gland.

Careful inquiries were now made of the parents and near relatives about the patient's previous health. They had regarded her as a perfectly healthy woman up to this attack. They had, to be sure, noticed the altered appearance of her eyes, but it had not made any impression upon either them or her, and had not been of long duration. She had had a spell of illness about six months previously, the exact nature of which he could not determine, but it had been accompanied with some irritability of the stomach and prostration. Since then she had been apparently healthy, bright, and active; had not complained of dyspnœa, and had been out on the day of the onset of the so-called "cholera morbus," for which he had been called to her. The vomiting continuing as the most distressing symptom, a carefully regulated diet was ordered, and tinct. ipecac. gtt. ij. was ordered every hour. The pulse was as high as 100 per minute.

The patient passed a restless second night. In the morning the vomiting was somewhat relieved, but not gone. The prostration was growing worse, and the case had assumed a threatening aspect. The pulse had risen to 170. Cyanosis of the hands and feet were observed. Consultation was now held with Dr. W. G. Porter, who concurred in the diagnosis. Calomel was ordered in one-half grain doses every hour; ex. opii, gr. ½, by suppository every two hours until quieted; digitalis, which had not been given because of the extreme gastric irritability, was also determined upon; brandy, as much as the stomach would bear. At the evening visit the pulse was found, as nearly as it could be counted, 70 to the third of the minute, 210 per minute. The vomiting had ceased. Ordered one half ounce of milk, with which tr. digitalis, ℥. x., was to be put, every half hour, the digitalis to be given only every hour after the fourth dose. Collapse was imminent; the patient has had several fainting spells. On the morning of the third day the pulse had fallen to 160, apparently under the digitalis. Dr. Porter again saw the patient. Ex. bellad., gr. ⅓, was added to the suppositories. Later that day the patient's pulse again failed. At the last visit the heart was beating in a very tumultuous way, and no pulse was perceptible at the wrist. The mind was perfectly clear. She died at the end of the third day of her illness.

The autopsy in this case was, unfortunately, not complete, owing to the jealousy of the family, who refused to allow the skull-cap to be removed. The heart was a little dilated in the left ventricle, and slightly hypertrophied. The lungs, kidneys, and suprarenal capsules were normal; the liver was not abnormally fat. The stomach was slightly congested, due probably to the excessive vomiting. There were

no other abnormal appearances in the chest or abdomen, which were alone opened.—*Jour. Nerv. and Ment. Disease*, Ap'l, 1888.

Roosevelt (J. W.) on a Case of Basedow's Disease, with Autopsy.—The patient had been admitted to the wards of Roosevelt Hospital, May 25, 1887. The patient was a female, widowed, forty-seven years of age, a housekeeper. Both the personal and family history were good. Two years before admission, the patient had commenced to complain of palpitation, dyspnœa upon exertion, and swelling of the throat, which was largest upon the right side. The patient could not lie upon the right side. In the course of a year the eyes commenced to protrude, and at the time of entering the hospital she had a profuse watery diarrhœa.

The pupils were found to be equal, the reaction to light and accommodation good. The lids did not follow the eyeballs. The neck measured thirteen inches around the lower thyroid region. There was dysphagia to solid food. The pulse was 100 to 120, and the respiration 38. The apex beat was found in the fifth space, mammary line. There was epigastric pulsation, and the area of dulness was slightly increased. There was a short systolic murmur at the apex. There was a systolic thrill over the jugulars, and a continuous venous hum. The pulmonary resonance was exaggerated. The veins of the retina pulsated, the arteries did not. There was no tension. The patient lived until May 31st. She suffered from a watery diarrhœa and restlessness, but was not otherwise sick. In walking to the bath-room, one evening, she fell dead. Autopsy showed the thyroid reduced in size, but still moderately enlarged, and of a pink color. The kidneys showed a trace of fibrous tissue, but otherwise the organs were normal. There was apparently nothing abnormal in the medulla, nor in the sympathetic or vagus nerves. Microscopic examination of these parts also showed nothing.—*Med. News*, March 31, 1888.

Is Phosphorus a Cause of Cancer?—Considerable discussion has of late arisen as to the possible etiological connection between arsenic and cancer. William Stanwell, in the *Lancet* for April 21, 1888, suggests a similar rôle for phosphorus. He says: "Arsenic has been used for I cannot say how long a period in pharmacy, nor have I at hand the means of referring back; but, in connection with phosphorus, in the British Pharmacopœias of 1864 and 1867 it existed, 'to be used in the preparation of the dilute phosphoric acid,' and the only preparations containing phosphorus were the dilute acid and the phosphates of ammonia, of lime, of soda, and of iron, the syrup of the phosphate of iron, and the antimony powder. No phosphorus oil and no phosphorus pills in their hundred and one varieties were then used to any extent; since then they are *authorized* and used by the million. I have had under observation, which calls for these remarks, cases of epithelioma, which have at earlier periods of life undergone more or less extensive treatment in the form of pure phosphorus in perles or pills. Undoubtedly the use of phosphorus has largely increased during the last twenty years; public, and I believe professional, opinion says that cancer has *pari passu* done the same during the same period. Arsenic I use often, and consider it of inestimable value in its proper place; phosphorus I believe to be a dangerous remedy, and it is certainly one that I can never prescribe, so great is my prejudice to it. I should be glad to hear any evidence that is likely to be in any way confirmatory of phosphorus aggravation to cancer. The benefit derived from lime salts distinctly indicates a possibility, at least, that I am not entirely in the wrong."

Lithium carbonate is a remedy now much in vogue, and this salt was found to possess a decided solvent action. In daily doses of 6 dcgr. of lith. carb. the effect of the urine upon uric acid is almost equal to that after the use of Fachingen. It has, however, the disadvantage of being excreted from the urine within twenty-four hours. In consequence, there is no after-effect produced.

That an effect upon calculi is not beyond the range of possibility, the experiments upon gravel abundantly prove. One can confidently expect a solution of smaller calculi after giving the remedies for a sufficiently long time. As regards larger stones, it is best not to be too sanguiue. In one case, after a two-days' use of Vals Désirée water, the urine had such an effect upon gravel and stone fragments that they not only lost considerable weight, but also were rendered soft and friable. In a case of lithotripsy the Vals water might render great service in rapidly dissolving fragments which might be left behind.—*Med. Record*, May 12, 1888.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital.

VOL. V., No. 23. June 7, 1888. WHOLE No. 71.

CONTENTS.

	PAGE
Original Article	269
Leading Article	270
Miscellaneous	272
Book Notices	280

ORIGINAL ARTICLE.

BY JOSEPH A. ANDREWS, M.D.

A Case of Primary Sarcoma of the Iris.—Primary sarcoma of the iris is of very rare occurrence, and the following example of this disease presents features of interest which make it deserving of being placed on record.

The patient, Martha B——, aged forty-five years, applied for advice at the Manhattan Eye and Ear Hospital, N. Y., in February, 1881, respecting a growth in the iris of her right eye. There is no history of the case in the record-book of the hospital, but the chief points of interest are, as I remember them, as follows: A very small tumor was seen in the iris near the pupillary border, but not extending beyond it. There was no pain in the eye, nor were there any external signs of inflammation. No positive opinion was given by the medical officers of the hospital who saw the case as to the nature of the growth, but syphilis was confidently excluded. It was decided to remove the growth by including it in an iridectomy, which was done by the late Dr. Agnew, of this city. The diagnosis was then made of unpigmented spindle-celled sarcoma of the iris. There was considerable inflammatory reaction following the operation, and it was decided in view, if I remember rightly, of the probable invasion by the original disease of the deeper structures of the eye, to enucleate the globe, which was done within a week after the performance of iridectomy. At the enucleation the partially healed corneal wound ruptured and the lens escaped.

Microscopic Examination.—The cornea in the vicinity of the wound is slightly infiltrated with pus cells; but in the sclera in this region there is considerable purulent infiltration. On the outside, the corneal wound is almost entirely bridged over with organized connective tissue; within, it is only partially closed. In some of the sections is seen a fragment of iris which had prolapsed into the corneal wound. The iris is densely infiltrated with pus-cells, both toward the pupillary margin and the ciliary body. In the stump of iris is an infiltration with cells, looking not unlike some cells near the tumor in the piece of the iris removed by the iridectomy, but they are not associated with them, and Dr. Prudden, the director of the pathological laboratory of the College of Physicians and Surgeons, to whom I am indebted for placing at my disposal for study the eye under consideration, tells me that he does not attach any specific character to these cells. There remains no trace of sarcomatous tissue in the eye; the tumor, therefore, must have been entirely removed by the iridectomy. Just below the point of excision of the iris there is a small dense collection of pus-cells beneath the uveal layer, and there is an extensive purulent infiltration of the pars ciliaris retinæ in this region; here too, between the vitreous and the pars ciliaris retinæ there is a collection of blood and pus. The vessels of the choroid are throughout engorged with blood; but this is the only inflammatory lesion present in the choroid. The lens and ciliary body are normal. The patient, at this date, May, 1888, is in good health, without any signs of disease.

Remarks.—The interest which attaches

to this case is twofold. First, the sarcoma was limited to the iris, and was entirely removed by the iridectomy. Second, the eye, it is most probable, might have been saved by the adoption of antiseptic precautions at the operation, which were omitted, the purulent infection having undoubtedly taken place at or shortly after the operation; this, at least is the lesson to be learned from this case, and it certainly is an important one to remember.

LEADING ARTICLE.

Finlayson on a Case of Embolism of the Mesenteric Artery which Recovered.—The patient was a married woman, about forty-five years of age, who was known to be affected with cardiac disease, involving the aortic valves. She had, about a year before, been affected with a slight hemiplegic attack, involving the face and arm, but she had quite recovered. The attack now to be described came on suddenly on 7th April, 1887, about 1 o'clock P.M. Her friends reported that she had had another "stroke," and the doctor who saw her took this view at first. Her left arm seemed quite powerless, but it was very painful, and she likewise complained much of pain in the epigastrium. When this report was brought, although pain in the arms so early in a paralytic seizure, or any thing like severe pain in the stomach, seemed very peculiar under such circumstances, Dr. Finlayson said it did not occur to him to doubt the paralytic nature of the attack which otherwise seemed so probable. Hot fomentations had been ordered for both painful regions. About eight hours later, it was reported that the pain was still much complained of, and that blood had now begun to come somewhat freely from the bowel. The idea of embolism of the mesenteric artery at once suggested itself, and a note was sent to the doctor making this suggestion, and advising ergot internally, and a cessation of the hot poultices in case this might favor the bleeding; chloroform liniment to be used as a stupe instead. This was done, but the doctor in attendance found her so ill on visiting at midnight, that he thought she was dying, and so he summoned Dr. Finlayson in consultation, who saw her for the first time about 1 A.M.—*i. e.*, twelve hours after the seizure. The patient then presented a most alarming appearance, with collapsed aspect and cold extremities, still complaining much of the pain in arm and stomach, and with blood coming from the bowel. On examining the arm, hitherto supposed to be parlyzed, it seemed to Dr. Finlayson that it was *powerless from pain*, and not from hemiplegia; and the patient, although obviously dangerously ill, had not the appearance of suffering from a cerebral affection at all. Further examination showed the pulse in the left arm to be absent, and the absence of pulsation was traced up to the bend of the elbow, above which it was quite natural; the pulsation in the other arm was present in the wrist. Dr. Finlayson said he at once concluded that the pain in the arm and previous paralysis were due to embolism, as he had seem similar symptoms before. (Subsequent inquiry at her regular attendant, who was from home, elicited the fact that the left radial pulse had previously been quite normal, and after some weeks or months the pulsation again returned to the left wrist, so that this part of the diagnosis seemed quite certain.) Viewing the case now in a completely different light, and not fearing any cerebral disturbance, treatment was at once adopted to relieve the pain by morphia subcutaneously. This acted well; heat was applied to the feet, stimulants given by the mouth, and chloroform stupes efficiently applied to the epigastrium. After waiting with the patient for an hour or so, the most alarming symptoms began to pass off, and some morphia pills were left to ward off the pain if it returned. In the morning, about 9 A.M., the report was favorable, the pain had been less, and the blood had stopped. In consultation at mid-day, some pain and tenderness, and even distention of the abdomen, a little lower down than the site of the original pain were made out, and it was agreed to treat the case as if it had been one of peritonitis, which it resembled in many respects, to soothe the bowels by the use of morphia, to avoid any risk from the use of purgatives, etc. Dr. Finlayson said that having to leave town that day for a fortnight, he did not see the patient again till several months had elapsed; but under the care of the doctor in attendance, who gave great attention to the case throughout, she made a most satisfactory recovery.

In an important paper on "Embolism of the Superior Mesenteric Artery," in the *Glasgow Medical Journal* for December,

1880, Dr. Moyes gives the following as the points insisted upon by Gerhardt and Kussmaul in the diagnosis. In this case most of them were present:

"1. A source exists from which the embolus might be derived." [In this woman there was aortic valvular disease.]

"2. Profuse, even exhaustive, intestinal hemorrhage sets in, which may be due either to a real injury to the mucous membrane of the bowel or to the hindrance of the mesenteric circulation." [In this woman the hemorrhage was profuse and alarming.]

"3. There is a considerable and rapid fall in the temperature." [Data are absent on this point in this case.]

"4. Pain in the abdomen is present, which may resemble colic and be very severe." [The pain was extreme in epigastrium.]

"5. Tension and tympanitic swelling of the abdomen occur at last, and there may be fluid in the peritoneum." [On the second day the tension of the abdomen, etc., exactly resembled a case of peritonitis.]

"6. Evidence of embolism of other arteries having taken place, either before or at the same time as the superior mesenteric, may be present." [There was clear proof of embolism of the artery in left arm *simultaneously* with the epigastric pain.]

"7. Palpation may reveal the presence of collections of blood between the folds of the mesentery." [This could not be alleged, at least with any confidence, in this woman's case.]

In the discussion following this paper, Dr. W. G. Dun read the following notes of a fatal case:

An engineer, æt. thirty-nine, came under Professor M'Call Anderson's care on the 6th of December, 1879, suffering from bronchitis and emphysema, with passive congestion of the liver, to a less extent of the kidneys, and dropsy. In addition to this, he had a well marked presystolic apex murmur, with occasional hæmoptysis.

Under treatment he improved very considerably, but on 21st January, 1880, he began to complain of pain across the abdomen just below the ribs, and of uneasiness in the region of the kidneys, especially the left.

On the 25th, he complained that the abdominal uneasiness was worse, and at night was seized with violent griping pain occurring in paroxysms of a few minutes' duration, with intervals during which it was less severe. The examination of the abdomen was negative, except that firm pressure relieved the pain during the paroxysms.

On the 26th there was no improvement. He was so restless that his temperature could not be taken, and diarrhœa had set in during the night.

On the following day (27th) the diarrhœa had increased, and he vomited matter which was very fluid and black. That night, after the subcutaneous injection of morphia, he slept for about six hours, awakening about two A.M. From this time he grew rapidly worse, the vomiting being profuse and consisting chiefly of altered blood, although the diarrhœa was not aggravated, and there was no blood in the motions.

On the 28th January, while in the act of vomiting, in the morning, he died.

On *post-mortem* examination, an embolism of the superior mesenteric artery was found which involved the colica dextra, ileo-colic, and vasa intestini tenuis branches. The portions of the large and small intestines supplied by these were very dark in color, and the mucous membrane was soft and pultaceous, and engorged with blood. These portions of the bowel also contained a large quantity of blood. The stomach, duodenum, descending colon, and rectum contained no blood, and their mucous membrane was natural in appearance. The left kidney had several emboli of long standing.

"The heart is considerably enlarged, weighing 17½ oz. The enlargement is mainly, if not entirely, of the right ventricle and auricle. The aortic valve is competent and the curtains are normal.

"The mitral valve is greatly altered, the curtains are coalesced and rigid, and there is frequent massive disposition of lime salts in the thickened valvular tissue. At one place there is a rough, ragged surface, as if a piece of calcareous material had been recently carried away. The mitral orifice is displaced downwards by the coalescence of the curtains, and only admits one finger. There are several globular thrombi in the left auricular appendage. The left auricle is considerably distended, and its wall thickened. The right ventricle is greatly enlarged. There are no thrombi in the right ventricle or auricle. The lungs are non-adherent."—*Glasgow Med. Jour.*, May, 1888.

MISCELLANEOUS.

Complicated Case of Occlusion of the Vagina.—Another instance of the rare cases in which a woman in labor is found to have complete occlusion of the vagina has been recorded by Dr. W. Zinsstag, of the Basle Gynæcological Clinic. The patient, a young primipara, being in labor, on being examined by her family doctor, was found to have an occluded vagina. He, thinking this arose from stenosis, sent her to the clinic. When first examined there, the finger felt a narrow canal, at the end of which a sharp-edged circular fold separated it from a somewhat more extensive cavity; behind this latter cavity the fœtal head was felt through a thick septum. On inspection, it was discovered that the canal was not the vagina, but a dilated urethra, and the sharp-edged fold the sphincter of the bladder; the cavity was the bladder, and the membrane separating the finger from the fœtal head the posterior vesical wall. From the orifice of the urethra to the fourchette there stretched a stong bluish membrane, across which several veins ran. No opening capable of admitting the finest probe could be found. A somewhat similar case of persistence of the sinus urogenitalis is described by C. von Braun in his text-book. Coition must have taken place through the urethra, and some opening in the hymen must have existed, permitting the escape of the menses, which had been normal, and also allowing of the introduction of the seminal fluid. This orifice must have become closed up during pregnancy. Incisions were made in the hymen and in the perineum, and the labor was satisfactorily concluded.—*Lancet*, May 12, 1888.

A Freak of Nature.—Dr. W. L. Kreider, of Prairie City, Ill., writes as follows to the *Med. Register*, April 7, 1888: "A child was born to Mrs. K., December 29, 1887. There was nothing unusual about the birth. Both hands were turned inward at a right angle, and held there firmly by the integument and shortening of the tendons of the muscles. Both hands were without thumbs. The fingers were all easily movable, and could be moved by the child. There was a strip on the top of the head, about two and one half inches long and one inch wide, which looked as if the skin and superficial fascia had been removed and a thin skin formed in its place without any hair. The rectum, instead of passing through its proper outlet, passed into the bladder, or at least the fæces passed through the penis. There was no anus, or any appearance of one. When the bowels moved, the passage was much slower than it would have been through the natural channel. The child seemed to do well up to the seventh day, when the bowels bloated, and the child died when eight days old."

Waxham (F. E.) on an Improved Laryngeal Tube.—A description and plate of a tube with a metal epiglottis are given, together with a discussion of its merits. Four cases are reported, two of them successful, in which this tube was used. Liquids could be taken much more readily than with the ordinary tube.—*Jour. Am. Med. Ass'n*, March 24, 1888.

In the Cincinnati *Lancet-Clinic*, March 31, 1888, two cases of intubation are reported by J. Eichberg, in the first of which life seems to have been saved by the violent expiratory efforts and deep inspirations caused by the entrance of milk into the trachea. In the second case, when the time came for extraction no tube could be found. Without waiting for special indications tracheotomy was done. The tube was passed from the rectum on the second day after the operation.

An interesting case of intubation for syphilitic stenosis of the larynx is reported in the *Brit. Med. Jour.*, April 7, 1888.

C. H. K.

Bradley (A. E.) and Curtin (R. G.) on Abscess of the Liver; Ulceration of Hepatic Vena Cava; Secondary Thrombi of Pulmonary Arteries.—The patient was a laborer æt. forty-eight, who has been a hard, drinker, and who, when a young man, had syphilis. He was admitted to the hospital Nov. 26, 1887.

Twelve weeks previous to admission, he was taken with a severe chill, and every night since, and occasionally during the day, the chill has been repeated.

These chills were followed by profuse exhaustive perspiration. At the time of the onset of these chills, he complained somewhat of shortness of breath, and noticed a pain extending around the right side. There existed a slight cough, appetite was poor, bowels constipated, and there had always been a marked thirst since the onset of the trouble.

He had a haggard, anxious expression of the face. The position of the heart seemed to be normal; the chest showed a bulging quite marked on the right side, and remained immovable over this region during respiratory movements.

The abdomen presented a prominence in epigastrium and right hypochondrium. Percussion over this area, especially posteriorly, elicited much pain, and dulness extended behind up as high as the angle of the scapula. On pressure over this region, patient complained of much pain and tenderness. An examination of the lungs revealed nothing definite, a few râles being detected posteriorly over the right base. The heart sounds were normal.

The regularity of his chills caused malaria to be suspected, but repeated examination of his blood failed to discover any of the characteristic blood changes known to exist in that condition.

The night of admission he had a chill lasting ten minutes, the temperature rising to 103.0°. The following morning it was 98°; on the 28th he had another chill with a temperature of 103° at 5 A.M., and 98° at 6 A.M.

From this time on he had frequent recurring chills and elevations of temperature.

From this on he had only one chill, with a temperature of 104.5°, which happened on the 10th. His cough, after admission, became aggravated, pain in the side became worse, orthopnœa supervened, and the dyspnœa became gradually worse. Appetite remained poor, the patient exhibiting craving for liquids. Hepatic abscess was suspected, and the case was so diagnosed. No exploratory puncture was made.

The treatment was purely symptomatic and stimulating, morphine being freely given to relieve the pain, and early in the case large doses of quinine. Patient died on the morning of the 12th.

At the autopsy, forty hours after death, there were found a slight hemorrhagic exudation in the left pleura, and a few soft adhesions to the right.

On the mitral were a row of small firm vegetations, but no ulcers. There were several small infarctions in the lungs. The main branch of the left pulmonary artery as it enters the lungs was plugged with a firm thrombus, which extends chiefly into a branch passing to the lower lobe. It was closely adherent and filled this main branch for two and one half inches.

It also threw out two branches, going to the lower part of the upper lobe. It was grayish red, softened, and in places had a puriform appearance. On the right side a larger thrombus occupied the bifurcation of the branches of the pulmonary artery going to the lower lobe.

At least half of the right lobe of the liver was fluctuating and had a swollen aspect. It was very intimately adherent to the right kidney, which was flattened. On laying open the inferior vena cava, about the orifices of hepatic veins coming from the right lobe, there were seen vegetations, and adherent thrombi, and for a radius of one quarter inch the endothelium was eroded. Slight pressure on the abscess squeezes a dirty pus with clots from these hepatic veins. On further pressure a creamy pus exudes.

Transverse section of the liver revealed an enormous abscess occupying one half of the right lobe. Toward its right border its wall was chiefly made up of thickened capsule, and there was here a well defined lining membrane.

In the very commencement of the colon were to be seen cicatrices of four ulcers; in the cæcum, one.

Brain and middle ear were not examined. *Weekly Med. Rev.*, May 12, 1888.

Suckling on Acute Peritonitis Successfully Treated with Saline Purgatives.[1]—A man, aged twenty-one, was admitted into the workhouse infirmary on Jan. 6th, suffering from acute peritonitis. Three days before admission he was attacked with vomiting and pain in the abdomen; there was constipation. The abdomen was tense and tympanitic, and the abdominal respiratory movements were abolished. There was extreme tenderness above the abdomen, the legs were drawn up, the pulse small and frequent, the expression anxious. He had retention of urine, and fever. No tumor could be detected in the right iliac fossa; vomiting was incessant, and pain about the umbilicus greatly complained of. Dr. Suckling thought that the peritonitis was set up by typhlitis, due to fæcal retention. Opium and belladonna were first given, but the vomiting and pain continued. Then half-drachm doses of sulphate of magnesium and sulphate of sodium, with ten minims

[1] See MEDICAL ANALECTIC, 1887, p. 223; 1888, p. 87.

of tincture of belladonna, were given every four hours. Improvement soon followed this treatment, several liquid motions being passed. On Jan. 9th, the vomiting, pain, and tympanites had passed off, and a distinct fulness could be observed with increased resistance to pressure in the right iliac fossa. The medicine was continued, with the result that the motions became more and more solid till the 14th. He continued to complain of dragging pain in the abdomen for some time; but in about three weeks he was able to get up, and five weeks after his admission was allowed solid food. He has since had two or three slight relapses, which at once yielded to purgatives and proper dieting; and at the present time there is a distinct indurated swelling in the right iliac fossa. Dr. Suckling was of opinion that in this form of peritonitis, and in typhlitis due to fæcal retention, saline purgatives in moderate doses, and with plenty of water, were of great value.

Hall (R. B.) on a Case of Ovariotomy, Illustrating the Occasional Early Necessity for Catharsis.—After removing the cyst, the usual sponge packing of the pelvis did not control the bleeding. To check this, as well as aid in cleansing the peritoneal cavity, water heated to 110° was turned into the abdominal cavity from an ordinary water pitcher until the bleeding stopped and the water returned clear. A glass drainage-tube was inserted and the cavity closed. The patient rallied slowly, and it was two hours before her temperature had again become normal. During the twenty-eight and one half hours that the drainage-tube remained in, eleven and one half ounces of bloody fluid was removed through it. On the following day, Friday morning, her pulse became more frequent, and at 6:30 P.M. it was 136 per minute, temperature 100°. The pulse during the night became more frequent and feeble, and at 1:30 A.M., Saturday, it was 144 per minute, but the temperature remained 100° to 100.2°, which was the highest point reached after the operation. I could not account for the rapid pulse, and it gave me no little anxiety about her welfare. Saturday, at 8 A.M., the pulse was 144 to 150, and so feeble that it was difficult to count it correctly. She suffered but little pain, but was restless, and frequently turned herself in bed. She evidently did not have peritonitis, but that something was going wrong was evident, and what that was was a puzzle to me. I had never before seen any thing just so queer. I had been very careful to unload the bowels the morning of the day before the operation, as is my custom, by a large dose of castor oil, which moved her several times, requiring a dose of opium to check them. She was given nothing but liquid food for forty-eight hours before the operation, during which time she remained in her room with the nurse, whose duty occasionally called her from the room occupied by the patient. At 8:30 A.M., Saturday, I determined to give her a physic, and gave half a seidlitz powder every half hour until she had taken nine doses, when by the aid of rectal injections her bowels moved freely. Imagine my surprise to find fully a teacupful of raisin seeds and skins in the first dejection. The puzzle was solved, and I now felt easy, knowing that this had been the cause of our worry, and the rapid pulse which in twelve hours had fallen to 108, with a temperature of 99.8°.

She had no further trouble, and has had a rapid convalescence, and at this writing, twelve days after the operation, is practically well. She brought with her a small basket, such as many ladies carry with them in travelling. In this she had a small sack of raisins, and when we took away her food she ate them all. What a little thing will cause a fatal termination after an ovariotomy this incident will show. Had we treated the case on the old plan of opium, and not to move the bowels for ten to fourteen days, we should have lost the patient, I am certain. Except for this little incident, I have never seen a case recover more rapidly than this one.—*Cincin. Lancet-Clinic*, May 26, 1888.

Owen (E.) on Lumbar Hernia Following the Track of Extinct Spinal Abscess.—The patient was a girl of five and a half years. A year and a half previously the child had fallen down six steps, and some months afterwards she had had pains in her back and in her foot. In due course an abscess formed over the left iliac crest; it broke when she was away in the country, and it kept on discharging for three months. Some time after the abscess wound had healed, a lump, which was naturally thought to be an abscess, again appeared over the iliac crest. Her back was straight and stiff, and there was a slight abnormal projection of some of the lumbar

spines. There was a rounded, reducible tumor, about the size of an orange, over the left iliac crest, the skin over its central spot showing a firm white cicatrix. The tumor was resonant on percussion, and probably contained a portion of the sigmoid flexure of the colon, some hardish nodules in the interior suggesting fæces. On returning the contents of the tumor the finger could be thrust through an abdominal opening, which evidently occupied the site of the gap between the anterior border of the latissimus dorsi and the posterior border of the external oblique—the triangle of Petit. After the child had been some weeks in the hospital, a vertical incision was made over the tumor, until what was supposed to be the region of the transversalis fascia was reached; the contents of the tumor were then reduced, and the pillars of the lumbar opening were approximated by three strong catgut sutures. The case did well; there had since been no return of the hernia, though there was still some weakness in the region of the small triangular space. Though lumbar herniæ had on several occasions been operated on as chronic abscesses, or had been dealt with as lipomata, and though cases were on record in which herniotomy had been performed with success, in which the bowel had become strangulated through the triangle of Petit, this was possibly the first occasion on which the radical cure had been performed for a reducible lumbar hernia.—*Lancet*, May 5, 1888.

Wallace (G. C.) on Quadruple Amputation; Recovery.—The patient was a German, sixteen years of age, weighing about one hundred and sixty pounds. He was frozen the night of January 12th. Being at school on the 12th, he started home as usual, and was overtaken by the noted January blizzard. He lost his way and was out all night, and was picked up for dead the next morning, but noticing him make a slight noise, the men who found him took him to a schoolhouse, about a mile distant, and there commenced trying to revive him by rubbing and applying kerosene oil. I was immediately sent for, but, owing to the severity of the storm, could not reach him until the morning of the 14th, when I found him in a semi-comatose condition, but entirely thawed out. I gave him some whiskey and quinine, and applied tincture of iodine and a solution of carbolic acid. In about forty-eight hours I had him taken home, and let him lie until January 27th, giving him meanwhile elix. pyrophos. iron, quinine and strychnine, and applied part of a mixture of ung. petrol. ℥ x, hydrastin 3 iv, ac. carbolic. 3 ij, once daily. On the 27th I took off both arms about half-way between elbow and wrist, and the right leg about three inches above the ankle-joint, and the left foot through the first row of tarsal bones, leaving three of them, and cut off the heel, leaving the os calcis exposed for over one inch. The flesh was putrid, but I found the bone uninjured, and so left it for the flesh to grow on again (which it has now done). I operated on all the limbs before dressing any of them or taking up any arteries; I next took off the point of his nose. After operating, I used hyd. chl. cor. 3 iv, spt. vini rect. 3 iv; one teaspoonful of the mixture to one pint of tepid water, and washed each stump with this solution. Next I saturated some absorbent cotton with the same solution, and applied it over each stump, covering this with oil silk.

I continued giving the elix. pyrophos. iron, quinine and strychnine, and discharged him on March 18th, when the wounds were all healed up, except one place about as large as a dime; and at the present time he has gained several pounds in weight, and claims that he feels as well as usual.—*Med. and Surg. Reporter*, May 26, 1888.

Huthins (F.) on Antifebrin.—Case 1. October 3, 1887, M. L., male, aged twenty-two, a Dane, very robust. Called me in the evening. He was burning hot, restless, tongue coated, pulse 98, temperature 104.2°. He was a good deal alarmed, as his brother died two weeks before in the same house, with typhoid fever. I gave 7 grains antifebrin, to be repeated every four hours through the night, unless he became quite comfortable. In the morning I found the pulse down to 84, and the temperature down to 101°. I lengthened the interval between the powders to six hours. He took 28 grains of antifebrin per diem for seven days, and at no time did the temperature go above 102°. The fever ran for twenty-one days. He was well fed and nursed throughout the illness. Diagnosis: bilious remittent fever. I was much pleased at the rapidity with which he regained his strength and flesh.

CASE 2. January 8, 1888, Mrs. Y., primipara, very robust, aged nineteen, was delivered of a stout boy four days previously under the care of a midwife; for the past twenty-four hours had been suffering a good deal with neuralgic pains in region of left ovary. Examination revealed nothing. Gave 5 grains antifebrin every six hours. The pain ceased in twenty minutes after the first dose, and has not returned. As a precaution, she took 5 grains a day for two or three days.

CASE 3. January 23, 1888, Mrs. McI., aged thirty-four, married three years, had never been pregnant. General health excellent, but has suffered from neuralgic headaches for several years. The attacks come on at the appearance of the menses, and last two days. She is utterly prostrate while they last. Has consulted several physicians without getting the slightest benefit. I was called in as a sort of forlorn hope. Gave antifebrin 6 grains, to be repeated in an hour if needed. She took one dose, and was so much relieved that she sat up and enjoyed the evening with her friends. The pain returning about nine P.M., she took another powder, and then had a good night's rest.

CASE 4. April 8, 1888, M. A., male, a miner, aged fifty-four, looks sixty-five. He has worked in very bad air for a long time. Has old bronchial catarrh, and has suffered much from neuralgia. Is very much broken down. Dr. M. was called to him yesterday, and said he could not live twenty-four hours. I found him suffering a good deal of pain in the left side of chest, and breathing with a loud rattle, but perfectly conscious. His urine was albuminous and rich in urates, scanty and high-colored. There was so much whistling and such loud crackling sounds in the bronchial tubes I could make no satisfactory diagnosis of the condition of the lungs. I gave immediately 8 grains antifebrin. As he is six miles from my home, I did not see him until the next day. I found him quite comfortable and very much pleased with the "powder." I have attended to his general condition as I thought proper, and have given him the antifebrin to prevent the chest pain, 8 grains in twenty-four hours. He is gaining rapidly, and promises to be about soon, though I tell him he never will be *well* again.

So far, I have seen no ill effects from the drug. I have had no occasion to give over 8 grains at a dose, nor to continue the use of it beyond one week.—*Weekly Med. Review*, May 12, 1888.

Hicks (B.) on Two Cases of Ovarian Tumor Associated with Pregnancy.—In the first case labor had continued thirty hours. The tumor came down, and prevented the head being seized with forceps, and turning was tried but found impossible. The child was finally delivered with long forceps, and is still living. The placenta required removal. The tumor grew rapidly after delivery, and was removed. It was adherent everywhere, and was compound in character, nearly colloid. The patient made an excellent recovery. In the second case there was an ovarian tumor which reached rather above the umbilicus. It was diagnosed to be composed of two cysts. The woman had missed two periods, and it was proposed to wait until after the middle of pregnancy. However, the cyst became intense and painful, and was removed. The pedicle was found twisted and the tumor adherent and becoming necrosed. No uterine action came on for two weeks, when an ovum was expelled. The cases showed that when ovarian tumor and pregnancy were concurrent, if the tumor gave signs of irritation, the sooner it was removed the better.—*Lancet*, May 5, 1888.

Price (J.) on Typhoid Fever Following Ovariotomy.—Mrs. E. N., age thirty-seven, one child sixteen years ago, one miscarriage fourteen years ago, complaining since miscarriage of great pelvic pain, etc.; was operated on February 11, 1888, for the removal of the right uterine appendages. The tube and ovary were firmly adherent to and under the fundus uteri. The ovary was enlarged and cystic. The removal was not difficult and the operation was completed in twenty minutes. Two years previously the left appendages were removed for a small inflamed and adherent ovarian cyst, the right side at that time appearing perfectly healthy. The recovery from this first operation was speedy, and for a year the patient seemed in perfect health. Then the symptoms of pelvic trouble returned, and were referred to the right side. From the second operation the patient reacted perfectly, and for nine days her temperature constantly remained above normal, varying from 98.6° to 100.1°, the oscillations never amounting

to one degree. During this time she also complained of a good deal of headache, weakness, and mental depression. On the evening of the ninth day her temperature ran up to 102° and she had a slight rigor. From that time she presented a typical case of typhoid fever, including the characteristic temperature record, stools, and eruption. The nervous symptoms were not particularly marked. The temperature varied from 99.8° to 104.8° for four weeks. The patient made a good recovery, and is now in better health than before the operation.

The patient was probably in the early stages of typhoid fever when she entered the hospital, there having been no cases of typhoid in or near the hospital at the time. The operation did not seem to influence the course of the fever, nor the fever the result of the operation. The temperature, combined with the early constipation and meteorism was naturally attributed to the operation and treated accordingly, until the diagnosis of typhoid fever was made, after which the usual expectant treatment for that disease was pursued.—*Maryland Med. Jour.*, May 19, 1888.

Maclennan (Wm.) on a Case of Hæmidrosis Treated by Means of Permanganate of Potash.—The patient was a girl of 14, who had never menstruated. For 8½ months she had suffered from the development of patches on the skin, which suddenly became painful, and shortly afterwards the seat at first of a serous and afterwards of a sanguineous discharge. The parts affected were the prominence of both cheeks, the suprascapular regions, and the front of both thighs and legs. Epistaxsis also occurred. Exacerbations were noticed about every third week.

Her bowels were carefully regulated by a pill of aloes and iron, and a pill of permanganate of potassium gr. i. was given thrice daily for two days before the time of probable menstruation. With the appearance of the menses the other manifestations ceased.—*Glasgow Med. Jour.*, May, 1888.

Grenfell (H. O.) on the Treatment of Pyrexia with Phenacetin.[1]—The author has used this product, which is analogous to antifebrin, with apparent beneficial effect in various febrile disorders. According to him it acts as a prompt antipyretic in rheumatism, phthisis, phthisis with pleurisy, pneumonia, and erysipelas.

The drug begins to act within half an hour after administration, and the patient generally perspires freely and feels drowsy. Sleep often follows and pain is relieved. The author also claims it acts well as an analgesic.

The most satisfactory dose for an adult is eight grains, and children bear the drug well.—*Practitioner*, May, 1888.

Nesbitt (W. B.) on Chloral Ammonium. Trichloramidoethylic Alcohol.—The odor of the compound is peculiar but not unpleasant. The taste, when a very small portion is taken, was compared by a friend to that of butternuts. However, when a dose is taken, it leaves a taste similar to that of chloral ; but, unlike the latter, it immediately disappears upon taking a couple of mouthfuls of water. I have administered it in some forty different cases, and have not found any unpleasant effects to occur. The dose has been from 5 to 20 grains.

In all the instances but three mentioned above, there was an increase in the number of respirations and in the pulse rate, for as long as I observed them, usually from half an hour to an hour. In some cases (nine) the increase was slight. In three the respiration and pulse remained the same.

The symptoms manifested immediately on taking the drug were a feeling of fulness or tension in the head, particularly noticeable in the region of the nostrils, and a pleasant diffusible warmth radiating from the stomach over the abdomen. The tension disappeared in a few minutes. In five observations with doses of five grains, made on myself, the symptoms were fully manifested, the respirations increased at the regular rate of about two per ten minutes for half an hour, the pulse increasing about twelve beats for that time.

For these latter auto-observations, however, I do not ask much credence, because, well knowing the close relations existing between the cerebrum and other nerve-centres, it is impossible to say, in this instance, just how far the wish for favorable results was father to the observed physiological action.

That there is, however, an undoubted stimulating action I am convinced, which

[1] See Acephenetidin as an antipyretic. MED. ANALECTIC, 1888, p. 157.

I think is easily accounted for if we consider the amount of amidogen present.

In comparison with urethan, it may be administered in any desired dose at once without disturbing the stomach. Indeed, it has a pleasant rather than an unpleasant influence on that organ, whereas urethan has to be administered in small doses that it may not cause vomiting. As to whether the choral ammonium lessens the blood-tension, like chloral, especially in the kidneys, in the diseases of which the latter is of such value, I did not have the apparatus to determine, but from the close similarity in chemical constitution I should think it would, especially as the stimulating effects were much more noticeable on the respiration than on the pulse.—*Med. Science*, May, 1888.

Klein (J.) on a Case of Total Absence of the Uterus and Vagina.—The subject of this abnormality was a woman of twenty-seven. Up to the age of twenty-one she had enjoyed good health. At that time she began to be ailing, complaining of headache and lumbar pains radiating into the thighs toward the knees. These pains were rather severe and continuous, being, however, much worse every three weeks, when they were accompanied for two days by nose-bleed. The blood was venous and of small amount. The woman was of medium height and size; the breasts were well developed, the *mons veneris* well covered with hair, and the abdomen supple, but tender on pressure in the iliac regions. The pelvis was rather contracted in all its dimensions. The external genitals appeared normal in every particular. Labia majora and minora, clitoris and urethra all were perfect. The vaginal orifice was hermetically closed by a fleshy hymen, imperforate and very resistent to the finger.

Chloroform was given, and by means of a finger in the rectum and a sound in the bladder it was ascertained that no uterus or vagina existed, the bladder and rectum lying in exact apposition. Ovaries of normal size and consistence were discovered to be in their customary place, joined together by several transverse bands which stretched across the pelvis.

Removal of the ovaries was proposed but refused.—*Gaz. Méd. de Strasbourg*, May 1, 1888.

Ox-Gall in Hydatids.—Dr. Don Juan Mercant mentions, in the *Revista Balear de Ciencias Médicas*, a case in which the injection of ox-gall was entirely successful in curing a hydatid tumor. The patient was a woman who first applied for advice several years ago, on account of a tumor in the middle of the leg. Below the main part of the tumor was a good deal of phlegmonous inflammation. On being opened a quantity of sanguinolent pus escaped, together with a number of hydatids. Injections of quinine, carbolic acid, iodine, and alum were used without producing much effect, the discharge of hydatids continuing. Extirpation of the cyst wall did not appear to be practicable; so strong nitrate of silver injections and other powerful remedies were employed, with the result that in about eight months the numerous openings which had been made healed up, and the leg was cured, though naturally a good deal atrophied. Some five years subsequently the tumor returned in its old situation. Its adhesions to the surrounding tissues precluded extirpation. It was therefore opened, and the contents (which were of a sero-purulent nature, with a number of hydatid cysts) evacuated. A boracic acid solution was then used to syringe out the cavity, and subsequently injections consisting of equal parts of ox-gall and warm water were employed. Altogether the contents of the gall-bladders of three animals were used. These sufficed to effect the destruction of the membranous cyst wall, and completely arrested the formation of hydatids. The patient was convalescent in a month's time.—*Lancet*, May 12, 1888.

McMurray (J. S. and A. S.) on a Case of Absence of the Vagina with Retention of the Menstrual Fluid.—The patient was a well-developed girl of sixteen, who, up to the age of fourteen years and nine months, was well. At that time symptoms indicative of the advent of menstruation came on. These symptoms recurred at intervals of about four weeks, and each time became more aggravated until she reached the age of fifteen and a half, when these painful symptoms became almost continuous and the general health and vigor became much impaired. The true nature of the case was overlooked, and by being treated symptomatically she became a victim of the morphine habit.

When she came under the care of the gentlemen reporting the case she was at once etherized and examined.

The hypogastric region was prominent, and there was found a well-defined globular mass, very similar to the pregnant uterus of five or six months. The pubes were well covered with hair, and the labia majora well developed, though upon being separated they revealed no introitus vaginæ, but only a shallow *cul-de-sac*, skirted with carunculæ myrtiformes. The perineum was distended; the anus pushed forward "pouting," as in the second stage of labor. On introducing the finger into the rectum, a tumor was discovered pressing the perineum, and feeling to the touch like the œdematous scalp of a child's head approaching the vulva. It was thought the uterus could be detected through the abdominal parietes, closely hugging the tumor above. This, however, was a deception, as subsequent developments plainly showed. The ovaries were not discovered. The bladder was pushed upward and forward, and it was with difficulty that a catheter could be introduced.

She was put on tonic and aseptic treatment for several days, and on August 8th was etherized, placed upon a table, and an operation to establish a vaginal canal was performed. Through a canula forty-eight ounces of dark, ropy fluid resembling treacle issued, so tenacious that it could be drawn out in threads a yard long. When the contents were well evacuated, the finger was introduced, and the opening was enlarged to the normal vaginal capacity. On examining the cavity, its walls were as firm as cartilage. Search was made for the uterus, but it was not recognized. The cavity was then thoroughly washed out with a hot solution of bichloride of mercury. A glass plug, as recommended by Sims, one inch in diameter, and three inches long, was then put into the canal. But it would not go as far as necessary, and on searching for the obstruction a stricture of the cavity was manifest, sufficiently close to prevent the introduction of the plug to its full depth. On closer examination, however, this proved to be the *cervix uteri resuming its natural form*, thus showing the uterus and a small portion of the vagina to have been one continuous cavity. The plug was retained in place by a T-bandage. She was put to bed, and soon rallied from the anæsthetic. She at once began to complain of severe pains in the pelvis, which were true "after-pains," such as follow labor. She was given a full anodyne, but these pains persisted and did not disappear for nearly a week. Twice a day for two weeks the plug was removed and the cavity thoroughly washed out with the bichloride solution; then once a day for three weeks.

In a few days she began to build up. At no time did the temperature exceed 101° F.; this was on the fourth day, but subsided on the fifth, and never was there more than a trace of suppuration. The glass dilator was worn at least twelve of each twenty-four hours, for three weeks after suspending personal surveillance of the case.

After about the tenth day all opiates were suspended; in fact no demands were present for their use, notwithstanding the liberal administration of morphine daily for over twelve months previous. A troublesome diarrhœa followed, attributable to the withdrawal of the drug, but as digestion improved and the system regained the function of assimilation, no further difficulty of this kind was experienced. Five weeks from the day of the operation, she walked into the office, having come ten miles by rail the same morning. The canal is as nearly natural as scar tissue, forming over a glass plug, can be. —*Am. Jour. Obstetrics*, etc., March, 1888.

Townsend (F.) on an Interesting Case of Atresia Vaginæ.—Mrs. X., aged 36 years, stated that she had been miserable since giving birth to her child, now eight years ago, up to which time she had enjoyed good health. She had been married eleven months when her baby was born, which was on the 21st of September, 1878. Her labor was exceedingly prolonged and tedious, lasting from a Wednesday at 2 P.M. until the following Saturday, on which day she was delivered of a large, dead male child at 12 o'clock noon, forceps being used. Her perineum was severely lacerated down to the sphincter ani.

Menstruation is regular, natural, scanty, and painless. She has no leucorrhœa, but does have intermenstrual pain of dull, heavy, bearing-down character, generally not severe, though at times "intense," not influenced materially by position of body nor by walking. Patient states also that, for months after the birth of her child, she found great soreness and tenderness about her privates, which were sadly increased by walking, and at *this* time she had great pains at each menstrual epoch.

On examination it was found that she had: ruptured perineum, occlusion of the vagina, which seemed to the finger to be absolute, and a uterus drawn well over to the left side of pelvis, oblique in position. I was enabled, after a long search, to pass a probe through a most minute hole in the cicatricial tissue of vagina, but this was only accomplished some days later, when patient visited me, as advised, during her menstrual flow, and at which time the menstrual blood was seen oozing through this same opening.

In this case it was therefore simple to be able to diagnosticate atresia vaginæ, almost absolute, due, no doubt, to retarded labor, where sloughing of soft vaginal walls followed because of pressure of advancing head of child, and, where the denuded vaginal walls came together, union became almost complete. Following the inflammation about the vagina came the pelvic peritonitis, which in time fixed the uterus as has already been described.

The treatment was immediately begun by those measures most likely to overcome the fibrinous vaginal barrier, as by dilating, stretching with the fingers, at times cutting with scissors and knife, etc., always using a plug of vulcanite of various sizes to keep the parts constantly separated. The cervix was found adherent to the left vaginal wall, from which it had to be dissected away. Under the use of hot vaginal douches, blisters, oleate of mercury, and Barnes' plaster of blue mass applied to the abdominal pelvic region, and by the diligent use of KI and tonics, the uterus became loosened from the lymph exudation in the pelvis, and movable. The vagina remained patent, menstruation became normal, and pain and all nervous phenomena vanished.

The case illustrates well the importance of delivering all cases of women in labor within a reasonable period; at all events, those cases where the second stage is at its height, and where the head of the child is causing pressure to soft parts.—*Alb. Med. Annals*, July, 1887.

Strauss and Toledo on Bacteriology of the Uterus after Normal Parturition.—The authors first examined the cavity of the uterus and the fluids it contained at different periods after parturition. The animals experimented with were rabbits, guinea-pigs, mice, and rats. As a result of their bacteriological studies, they decided that no micro-organisms exist in the uterus or secretions of the uterus after normal labor. In another series of cases they introduced various micro-organisms into the uterine cavity at varying periods after parturition, with the result of producing in one instance only any pathological result. This occurred when the germ of chicken cholera was introduced into the uterine cavity of rabbits, which are, as is well known, particularly susceptible to that disease. In view of this singular resistance to infection on the part of animals, the authors are at a loss to explain the great vulnerability on the part of lying-in women.—*La Tribune Méd.*, May 13, 1888.

A Leech Attached to the Subglottic Region of the Larynx.—In the *Rev. de Méd et de Ph. Mil.* the following extremely interesting case is reported. A soldier, entirely ignorant of the fact that he had swallowed a leech, had been troubled for eight days by the spitting of blood. In spite of the hoarseness and a sensation of a foreign body in the larynx, the patient carried the animal about for more than twenty days, its presence not being detected by the laryngoscope. On the twenty-third day, during an expiratory effort, Dr. Godet saw the leech for the first time. Not having the proper instruments to remove the animal by the natural channels, the doctor performed median thyrotomy and, separating the halves of the thyroid cartilage, removed the offender without any difficulty. Complete restoration of the functions of the organ ensued.—*Le Courrier Méd.*, May 12, 1888.

BOOK NOTICE.

The Texas Health Journal.—J. R. BRIGGS, M.D., Editor. This is to be a monthly publication of thirty-two pages in magazine form; the first issue being published July 1, 1888. Price, $2 a year in advance.

The *Journal* will be devoted exclusively to the science of health; keeping constantly before the public mind such rational principles of sanitation and dietetics as experience and observation have taught are conducive to the health, happiness, and comfort of a people. Each issue of the *Health Journal* will contain the sifted gems of advanced medical thought; which, if followed, will save medical fees, and bar untold pain resulting from ignorance and neglect.

Published by the Health Journal Publishing Co., Richard Flood, Business Manager, Dallas, Texas

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital.

VOL. V., NO. 24. June 14, 1888. WHOLE NO. 72.

CONTENTS.

	PAGE
Leading and Original Article	281
Therapeutics	285
Miscellaneous	291
Book Notices	292

LEADING AND ORIGINAL ARTICLE.

BY CHARLES H. KNIGHT, M.D.

Malignant Disease of the Larynx.[1] —There are four methods of dealing surgically with malignant disease of the larynx which deserve to be considered, namely, galvano-cauterization, total extirpation, partial laryngectomy, and tracheotomy. In estimating the respective merits of these operations much will depend upon what theory of the disease we may accept, as well as upon the anatomical structure of the morbid tissue. Should we believe in a stage of "local malignancy," or, in other words, that "cancer is primarily a local disease," we may look more hopefully to a radical operation for permanent relief. On the other hand, if we believe that cancer is constitutional at the outset, a palliative operation will rather commend itself. A similar view will be held by those who, while admitting the local origin of cancer, a theory to which modern pathology tends, maintain that our means of diagnosis do not enable us to recognize the disease early enough, in most cases, to warrant an attempt at radical extirpation. Statistics show that the results have thus far been more favorable in sarcoma than in carcinoma, the tendency to relapse being most marked, and the immediate results being most disastrous in cases of infiltrating epithelioma.

There is not much to be said of the first method, since it seems to have been resorted to in but few cases. A case has been reported by Schnitzler[2] in which his diagnosis of epithelioma was confirmed by several eminent microscopists. The growth was repeatedly destroyed by the galvano-cautery, and the patient was still alive, and free from recurrence after an interval of twenty years. Fraenkel[3] operated with the galvano-cautery in a case of carcinoma three times in as many years, the patient remaining free from recurrence two years after the final operation. Such results are most encouraging.

At the London meeting of the International Medical Congress, Foulis,[4] who was one of the strongest advocates of laryngectomy, maintained that extirpation should be practised for malignant disease as soon as the diagnosis is clearly made. He admitted only two barriers to the operation: extreme age, that is, above seventy years, and implication of the cervical glands. He advised the operation also in certain intractable cases of advanced thickening and stenosis, even though not of malignant origin. In the Clinical Society's Transactions Henry Morris[5] gives the history of a fatal case of total excision of the larynx for epithelioma. The concluding words of this paper are as follows: "There seem to be two sets of conditions, which indicate and warrant the operation. The one is where a malignant disease, filling or nearly filling the larynx, is confined within it, and therefore where, though surrounding parts

[1] Continued from p. 248.
[2] *Br. Med. Jour.*, Dec. 17, 1887, p. 1356.
[3] *Arch. für klin. Chir.*, B. xxxiv., p. 281.
[4] Trans. Seventh Internat. Med. Cong., 1881, vol. iii., p. 251.
[5] Trans. Clin. Soc., London, vol. xx., 1887, p. 37.

are threatened with infiltration, the whole of the disease is nevertheless capable of removal. The other is where tracheotomy for intra-laryngeal growth having failed to afford relief, the patient is deprived of rest and sleep, and his life is incessantly imperilled by paroxysms of dyspnœa and cough." Cohen,[1] without personal experience in the operation, expresses the opinion that complete laryngectomy should be restricted to sarcoma, intrinsic carcinoma, and possibly to circumscribed extrinsic carcinoma which has not extended to adjacent structures or involved the lymphatic glands.

At a meeting of the Berlin Medical Society, Nov. 16, 1887, Hahn,[2] whose experience has been most extensive, stated that he had extirpated the larynx fifteen times. Thirteen of his cases were fatal. One patient, seventy-five years of age, has had no recurrence, the operation having been done seven years ago; and one, operated on a year ago, has an enchondroma near the tracheal fistula, not requiring an operation. This authority believes that extirpation should be reserved for so-called keratoid or cornifying carcinoma. In the case of soft infiltrating carcinoma surgical interference should be limited to tracheotomy, where required to relieve dyspnœa.

At the recent Congress of French Surgeons Molliere[3] mentioned having once done a partial laryngectomy, and he expressed the opinion that in limited carcinoma there should be no hesitation in partially or completely removing the larynx.

Of recent contributions to the literature of cancer of the larynx an article by Tissier[4] is one of the most important. A very complete analysis of the surgery of malignant disease of the larynx has recently been published by Wolfenden.[5] This writer has collected 105 cases of total extirpation for cancer, 9 for sarcoma, and 6 for various other conditions. Of partial laryngectomies he has 28 for cancer, 2 for sarcoma, and 10 for other conditions. Only nine of the cases of complete extirpation for cancer were known to be living twelve months after the operation. From an interesting statistical review of extirpation in *La Pratique Médicale*, November 22 and 29, 1887, it appears that in a very large majority of cases death resulted from pulmonary complications and recurrence of disease, in about equal proportion. These tables contain a few cases not found in Wolfenden's list (Gerster obs. 39; Schmidt, obs. 99; Stewart, obs. 143), while the latter collection includes a much larger number which do not appear in the former. In several fatal cases death cannot be fairly attributed to the operation. For example, in a case operated on by Péan,[6] March 6, 1886, a man sixty-five years of age, whose whole larynx was removed for epithelioma, leaving the cricoid cartilage, a fatal termination was due to the introduction of milk into the bronchi through an œsophageal tube. A case operated on by Novaro, August 18, 1882, died from asphyxia caused by a feather, which had been used to clean the canula. Several cases should be added to those already published, but they are generally too recent to be of statistical value.

A case is reported by Perossi in a Milan journal (Caffé). The patient who is still in good health is said to have had his larynx removed in 1875, this having been the first laryngectomy in Italy and the fourth in Europe.[7] At the Third Congress of French Surgeons two cases of laryngectomy were reported by Desmons.[8] In one, a partial operation, recurrence at the base of the tongue took place in nine months; the other, a case of complete extirpation, remained well ten months after the operation. This observer believes extirpation superior to a palliative operation, and thinks that intrinsic epitheliomata of slow growth are most favorable for surgical interference. Maydl[9] states that in one of his cases, supposed to be cured, recurrence took place after twenty-five months. He thinks that no case should be considered definitely cured, until three years have passed without recurrence. Salomoni[10] gives

[1] "The Internat. Encycl. of Surgery," vol. v., p. 771.

[2] *Berlin. klin. Wochenschr.*, Dec. 4, 1887, p. 919. According to report of the Seventeenth Congress of the German Surgical Society in the *N. Y. Med. Record*, May 12, 1888, Hahn has lost two cases out of six of partial, and ten out of twelve of total, laryngectomy. See also *Jour. of Laryngol. and Rhinol.*, May, 1888.

[3] *Med. Record*, N. Y., April 14, 1888, p. 421.

[4] *Gaz. d. hôp.*, Nov., 1887, No. 139.

[5] *Jour. of Laryngol. and Rhinol.*, Dec., 1887, and Jan., 1888.

[6] *Gaz. méd. de Paris*, April 17, 1886, p. 182.

[7] *Med. News*, Phila., April 7, 1888, p. 391.

[8] *Rev. de chir.*, No. 4, April, 1888.

[9] *Internat. klin. Rundschau*, No 4, 1888.

[10] *Centralbl. f. Chir.*, Sept. 17, 1887, p. 704.

104 cases of total and 24 of partial extirpation, with the history of a third case, fatal on the third day, operated on by Bottini. He estimates the mortality at 43.6 % in carcinoma and 16.6 % in sarcoma. Cacciopoli[1] removed the larynx and the first six rings of the trachea for sarcoma on Feb. 19, 1888, this being the thirteenth laryngectomy in Italy. Gardner[2] reports a successful case of total extirpation for cancer. A most extensive operation has recently been reported by Caselli.[3] The larynx, pharynx, base of the tongue, both tonsils, and the soft palate were removed by means of the galvano-cautery knife and loop. But little blood was lost, and the patient not only survived the operation, but recovered with ability to swallow and to use an artificial larynx. Semon[4] reports a case of partial excision for epithelioma, done by MacCormac, the patient dying from pneumonia on the third day. This case furnishes an instance of direct cancerous inoculation, which has also been exemplified in cases reported by David Newman[5] and by Bergmann at the Berlin Medical Society. Directly opposite the principal growth there was a small neoplasm on the left vocal cord, which was excised and which also proved to be epitheliomatous. Four cases of resection of portions of the pharynx and œsophagus together with the larynx have been reported by Iversen.[6] The only case that recovered was subjected to a most formidable operation for epithelioma. The larynx was free from disease, but was excised together with the left lobe of the thyroid gland, the laryngo-pharynx, and the œsophagus to the level of the first dorsal vertebra. This patient still lives, fourteen months after the operation, and is said to be "doing well." Exactly what the term implies it is difficult to realize.

It is impossible to read the after-history of the few who have survived the operation, and of the fewer so-called successful cases of complete laryngectomy, with rare exceptions, without a feeling of commiseration. The loss of voice may be in part supplied by an artificial larynx, but in many cases the dysphagia cannot be overcome, artificial feeding has to be resorted to, and the patient's existence, if not one of excessive misery and perpetual dread, is at best far from satisfactory. Butlin[7] affirms that the condition of many of the patients was not only not improved but was actually made worse by the operation. After partial laryngectomy, however, the voice may become almost restored and there is no difficulty in swallowing. In Stoerk's successful case of partial extirpation for carcinoma, the anterior part of the larynx having been removed, two bands of mucous membrane are reported to have formed, which enable the patient to speak intelligibly.[8] Both the immediate and the remote results of the partial operation are far more favorable than those of total extirpation. Probably this state of things may be in part explained by the fact that cases adapted to a partial laryngectomy are in much better general condition than those advanced to a degree requiring more radical measures. Undoubtedly with improvement in means of diagnosis and in operative technique, and with judicious selection of cases, even better results may be expected. It is possible that the modified laryngectomy suggested by Cohen[9] may prove to be a valuable expedient in certain cases. The retention of the framework of the larynx, which is one of the important features of Cohen's operation, is highly desirable, and there is but little risk in leaving the cartilages, since it is well known that they resist the advance of malignant disease and but rarely become infiltrated.

Schwartz, in his valuable monograph on "Tumors of the Larynx," says that notwithstanding the fact that cancer tends to remain circumscribed within the larynx and hence offers favorable opportunity for surgical intervention, the rule of treatment will be palliative, until methods of diagnosis permit us to determine the nature and origin of malignant tumors in their earliest stage. At first glance it would seem that there could be no question between tracheotomy, as a palliative measure, and intubation. Allowing that the latter may be resorted to in an emergency, we can hardly expect a larynx occupied by malignant disease to tolerate an intubation tube of

[1] *Jour. Am. Med. Ass'n*, April 14, 1888, p. 464.
[2] *Australasian Med. Gaz.*, Feb., 1888, p. 122.
[3] *Gaz. méd. de Paris*, No. 1., Jan. 7, 1888.
[4] *London Lancet*, April 7, 1888.
[5] *Glasgow Med. Jour.*, Feb., 1888.
[6] *Jour. of Laryngol. and Rhinol.*, March, 1888.
[7] "Operative Surgery of Malignant Disease," 1887, p. 197.
[8] *Wiener med. Wchnschr.*, Dec. 3 and 10, 1887.
[9] Trans. Am. Laryngol. Ass'n, 1887, p. 38.

sufficient size and proper shape to insure its permanent retention. It was my good fortune to witness last week an intubation by O'Dwyer in a case of supposed tubercular laryngitis, in which there was extensive ulceration. The stenosis was caused by granulation tissue and submucous infiltration. After the first irritation had subsided the tube was worn with the greatest comfort. The chief objection to intubation, inability to swallow, especially fluids, was conspicuous in this case, and the patient had to be nourished by enemata for several days. The tube is still in position, this being the sixth day, and it now causes no inconvenience, except in deglutition.

It may not be unsafe to predict a future for intubation, even in the field of malignant disease. Having determined, in a given case, that tracheotomy is the only alternative, we have merely to decide as to the time of its performance. Shall it be done early, or as a last resort? Attempts to give curative rest to the larynx by tracheotomy in laryngeal phthisis, as advocated by Beverley Robinson, and more recently by Schmidt,[1] have met with disappointment, and we are therefore disinclined to expect any thing more from the operation in cancer of the larynx than relief of dyspnœa. Experience has taught us to regard the operation itself with but little apprehension, so that we shall probably be disposed to take middle ground, and neither resort to it prematurely nor postpone it until life may be menaced by the obstruction to respiration. Petit[2] advocates early recourse to palliative operations in malignant disease. The rule laid down by Pugin Thornton[3] is as follows: "If the morbid condition causes little or no difficulty in swallowing, but only dyspnœa, the operation is to be decidedly recommended. In the words of Mackenzie,[4] our objects are to prolong life and promote euthanasia. The former indication may be "best fulfilled by resorting to tracheotomy before the constitution has suffered from the impediment to free respiration." It is unnecessary to quote cases in proof of the statement that life may be prolonged by tracheotomy. The recent experience of Johnson[5] has been so often repeated that the matter is no longer open to controversy. My own conclusions with regard to operative interference in malignant disease of the larynx are as follows:

(1) Total extirpation of the larynx *for carcinoma* should never be undertaken. The dangers of the operation, the unsatisfactory condition, mental as well as physical, of those who survive, the increased probability of recurrence in the case of a lesion so extensive that a partial operation will not suffice, seem to furnish sufficient ground for excluding this operation from the catalogue of accepted surgical procedures. It may be admissible in certain cases of sarcoma.

(2) Partial excision of the larynx for carcinoma may be justifiable in case of a positive diagnosis of intrinsic disease. As we develop our diagnostic resources we shall be enabled to identify malignant disease while it is still localized, and so accomplish its eradication without sacrificing the whole larynx.

(3) In all other cases tracheotomy should be resorted to when demanded by the symptoms. As compared with complete laryngectomy, tracheotomy is in itself devoid of risk, offers the patient far more comfort, and promises at least equal extension of life.

(At the conclusion of this paper, which was read at a meeting of the section in Laryngology and Rhinology of the New York Academy of Medicine, the history of a fatal case of malignant disease of the larynx was presented, death having occurred two days previous. The patient was a man sixty-seven years of age, who began to be hoarse a year ago, and gradually became completely aphonic. Pain, referred to the left side of the larynx and shooting towards the ear, was a later symptom. The sputa were occasionally bloody. Two months ago a small gland at the anterior margin of the left sterno-mastoid was observed to be enlarged. For the last three or four months there had been progressive emaciation and increasing dyspnœa, until five days ago, when the stenosis became so extreme that intubation was attempted. The tube could not be retained, but the dyspnœa was in a measure relieved by the temporary pressure of the tube, and the patient died two days later of exhaustion.

[1] *Deutsche med. Wchnschr.*, Dec. 9, 1886, p. 871.
[2] *Bull. gén. de thérap.*, vol. xcv., No. 7, 1878, p. 298.
[3] "On Tracheotomy," 1876, p. 52.
[4] "Dis. of the Throat and Nose," 1880, vol. i., p. 349.
[5] *N. Y. Med. Jour.*, Sept. 24, 1887.

He obstinately refused tracheotomy, and would not permit the removal of a piece of the tumor for microscopic examination. My examination with the laryngoscope, nearly three months ago, showed an irregular tumor, of dark-red color, involving the left vocal band, except its posterior position. It projected to the middle line, involved the anterior commissure, and probably extended some distance below the left vocal band. The whole larynx was hyperæmic, and the left ventricular band and ary-epiglottic fold were much infiltrated. There was complete fixation of the left arytenoid and vocal band. No ulceration existed at that time, and no subsequent laryngoscopic examination was made, so that it is impossible to say what changes took place in the tumor. Dr. F. Lange exhibited a patient wearing an artificial larynx, upon whom he had performed laryngectomy, in several operations, until the whole larynx was extirpated. In the absence of the operator, the reader of the paper demonstrated a case operated on by Dr. W. T. Bull nearly four weeks previous. The patient still wore an ordinary tracheal canula, and was fed through an œsophageal tube. It was expected that he would be ready for an artificial larynx within a fortnight. The result in each of these cases bears eloquent testimony to the skill of the operator and the care of the after-treatment, but should not yet be used as an argument in favor of laryngectomy.)

THERAPEUTICS.

Hewitt (F.) on the Production of Anæsthetic Sleep in Patients Suffering from Grave Constitutional Disorders.—I shall deal with those conditions only which are most commonly met with in hospital and other practice.

GROUP I. *Asthenia; Collapse.*—I would include in this group all those cases in which a condition of extreme prostration has become established. As familiar examples I may mention the following: Cases of *acute and chronic intestinal obstruction; advanced œsophageal or pyloric stricture; prolonged suppuration with hectic; profound cachectic or anæmic states*, from whatever cause arising; *recent and profuse loss of blood*, etc. Generally speaking, ether is the best anæsthetic in cases of this class. The pure anhydrous ethylic ether should be employed, and should be *very gradually* administered from a cone or folded towel—*i. e.*, with plenty of fresh air. The asphyxial element which is introduced by the use of an inhaler is very deleterious in asthenic states of the system. I cannot speak too highly of the merits of pure ether, administered as described, in these cases. I have employed it for patients whose vital functions have become reduced to the lowest possible ebb, and always with the most satisfactory results. The stage of excitement and tonic spasm so common in stronger persons is usually feebly represented, or even absent, and a small quantity of the anæsthetic will be found to suffice. Almost equal in merit to pure ether for such cases is the A.C.E. mixture, which, if freshly prepared and given gradually by means of a drop bottle and Skinner's mask, produces admirable results. Nitrous oxide cannot be recommended for these patients, either as a separate anæsthetic or in combination with ether, for the function of respiration, already weakened by reason of the feeble innervation of the patient, is prone to become more and more shallow, and to cease from sheer paralysis of the nervous mechanism. Lastly, the administration of undiluted chloroform is not advisable in patients of this group, unless special indications exist, as a comparatively small dose may, even in experienced hands, produce alarming or fatal cardiac depression. Diluted with from one fifth to one eighth of pure alcohol, and administered by Junker's inhaler, there is far less risk than under other circumstances, and should the asthenic state of the patient be complicated by any affection of the air-passages, this would be the most appropriate anæsthetic to employ. It is unnecessary in most cases to secure persistent abolition of the lid reflex; an occasional glimpse of this or some other reflex phenomenon may be advantageously allowed. When once complete anæsthesia has become established, very little of the anæsthetic will be subsequently needed. The head should be kept low, and the lower jaw pushed well forward, to allow free ingress and egress of air. The color of the lips should be noted, and the respiration listened to with unremitting attention. Failure of respiration in patients of this class is frequently, perhaps usually, preceded by symptoms of cardiac depression. In patients who are the subjects of advanced hectic at the time

of operation, as well as in those whose heart's action has become enfeebled and hence accelerated by exhausting disease, the pulse usually remains rapid throughout; and if the anæsthetic be pushed unduly, symptoms of the gravest kind are liable to arise. Very little may be sufficient in cases of this group to upset the functions of the respiratory centres, already exhausted by malnutrition. An anæsthetic, more especially ether, might readily produce paralysis of the heart or respiration, or both. Most hospital surgeons must have met with cases of strangulated hernia and other exhausting diseases in which the patient has died either immediately before or during the operation, and although in many instances other causes than the administration of the anæsthetic may have been at work, it is certain that the incautious employment of a drug such as ether or chloroform in such cases has not infrequently proved fatal.

GROUP 2. *Morbus Cordis.*—Although the existence of heart disease does not contra-indicate the employment of a general anæsthetic, it is desirable that we should exercise every care when called upon to anæsthetize patients suffering from valvular or other cardiac affections. The most important point to determine is the presence or absence of bronchial or pulmonary œdema and of pleural effusion as secondary results of the valvular mischief. There are, of course, many cases of morbus cordis in which the pulmonary circulation has suffered but little in the course of the malady; whilst in other instances, either from inability of the right heart to maintain the requisite tension in the pulmonary arterioles, or from the backward pressure of an over-distended left heart, or from a combination of both of these causes, such engorgement and œdema exist that the choice of the anæsthetic must be regulated rather by the pulmonary than by the cardiac symptoms. If after careful auscultation no evidence of pulmonary œdema be detected, the A.C.E. mixture or pure ether, administered from a cone, will be found to be most suitable. I have placed the A.C.E. mixture first, because with it I have anæsthetized patients suffering from nearly every form of heart disease, and I can thoroughly recommend it for all cases in which there is an absence of pulmonary congestion and œdema. The objections which have been raised against the use of mechanical mixtures of anæsthetics are not so weighty (at all events in the case of the A.C.E. mixture) as they would at first sight appear to be. It is true that the rates of the evaporation of alcohol, chloroform, and ether are distinctly different; and in those mechanical mixtures which produce an anæsthesia which is due as much, or almost as much, to ether as to chloroform, such an objection might be a serious one. But with the A.C.E. mixture this is not the case. The anæsthetic influence of the small quantity of alcohol in the mixture may be disregarded; whilst that of the ether can only be but slight, seeing that a large quantity of the latter is necessary to produce anæsthesia when administered with a copious supply of air. The A.C.E. mixture may, indeed, be regarded as producing its anæsthetic effect chiefly by reason of the chloroform it contains. But in consequence of the dilution of the latter with miscible fluids, and by reason also of the stimulant effects of those fluids, the mixture is, *cæteris paribus*, far safer than chloroform. The A.C.E. mixture is not only well borne in valvular disease, but also in those cases in which there is every reason to believe that fatty degeneration of the heart is present. It is common to meet with patients past middle life, and inclined to obesity, whose vascular systems, either from alcoholic habits or from other causes, have undergone profound degenerative changes; the arteries are thickened, the pulse is weak, the heart's action is feeble, halting, and irregular, and hepatic disease is usually present. Now, in patients of this type there is no better anæsthetic than the mixture alluded to. Ether administered in a Clover's or Ormsby's inhaler is badly borne; and chloroform is best avoided unless bronchial mischief or pulmonary congestion is present. Should ether be selected as the anæsthetic in cardiac disease, it may, in many cases, be safely preceded by nitrous oxide, or administered from the first by Clover's inhaler. In uncomplicated mitral regurgitation, for example, notice need hardly be taken of the valvular condition, and ether may be given as in ordinary cases. But if the heart be acting feebly and irregularly, and there be evidence of extensive valvular disease, ether should not be administered by Clover's method, but should be given gradually from a cone or towel. If it be found, after commencing the administration of ether

(or the A.C.E. mixture), that cyanosis and feeble or embarrassed respiration are produced, no time should be lost in changing the anæsthetic to chloroform. Should signs of pulmonary engorgement be present, chloroform, with or without a small quantity of alcohol (one fifth to one eighth), should be preferred to the A.C.E. mixture or ether. As already mentioned, cases of morbus cordis with pulmonary symptoms really resolve themselves into pulmonary cases, and the administration of anæsthetics in such cases will be considered below.

GROUP 3. *Functional and Organic Diseases of the Brain.*—We may be called upon to anæsthetize patients who are more or less unconscious from the presence of some intracranial lesion. Cases of cerebral *tumor*, *abscess*, and recent or old-standing *depressed fracture of the skull*, have within the past few years, been frequently and successfully dealt with by operation. Moreover, it is occasionally necessary to administer an anæsthetic to a patient with cerebral disease, not for the relief of the cerebral affection, but for other surgical procedures. As examples of the latter class of cases I may mention patients suffering from one or other of the numerous forms of *insanity*, *chronic epileptics*, etc. Whatever may be the nature of the operation, the greatest care will be necessary in conducting the administration If well-established coma be present, no anæsthetic need, of course, be administered; but if reflex action be more or less intact, some anæsthetic must be given in order to secure the necessary degree of quietude. Semi-comatose patients require but a small quantity of an anæsthetic; and the feebler the pulse and respiration, the greater need will there be for watchfulness and caution. Chloroform is preferable to ether in patients suffering from advanced cerebral disease, because of the frequency with which pulmonary œdema is present in such cases; but should the respiration be unimpaired, ether may be given or the A.C.E. mixture employed, in cerebral surgery chloroform is certainly preferable to ether. The latter anæsthetic has, however, been used in many cases, and, so far as the safety of the patient has been concerned, with good results. In operations upon the brain or its membranes, chloroform possesses these advantages over ether: in the first place, vascularity is far less than when ether is used; and in the the second place, should any pulmonary engorgement previously exist or arise during the operation, the vapor of chloroform will necessarily be tolerated better than that of ether. The practice of giving patients about to undergo an operation upon the brain or its membranes a subcutaneous injection of morphine just before the administration of the chloroform is an excellent one in those cases in which the functions of the medulla have in no way become impaired by the progress of the cerebral lesion. It is a noteworthy fact that if chloroform be preceded by even a small dose of morphine very little of the anæsthetic will be needed to secure quietude when once deep anæsthesia has been produced. In those cases in which, from the progress of the cerebral disease, respiration is feebly or inadequately performed, I should consider the exhibition of morphine fraught with the greatest danger. In many if not most cases of advanced cerebral diseases, patients tend to die from an interference with the activity of the respiratory centres; and any sedative, such as morphine, might help to accelerate the fatal event.

I had recently to anæsthetize a patient at Charing Cross Hospital who had been suffering from unilateral epileptiform attacks dependent upon a compound comminuted fracture of the skull, which had occurred some months previously. The skull was to be trephined. The patient was a strong, thickly-set man. A fifth of a grain of morphine was given subcutaneously five minutes before I commenced the administration of the anæsthetic (chloroform). I experienced some difficulty at first in producing anæsthesia, the patient taking a very large quantity of chloroform. Mr. Victor Horsley, who was present on this occasion, informed me that he had met with a similar case, in which it was found almost impossible, after morphine, to narcotize the patient with chloroform. In my case, however, after from seventeen to twenty minutes anæsthesia was produced, and the patient breathed deeply and stertorously. For the remainder of the time I used very little chloroform indeed. I allowed the lid reflex to reappear and to remain, and the patient passed into a state of analgesia, rather than anæsthesia, for he subsequently informed us that he was conscious of the performance of a considerable portion of the operation—could hear us speak, etc.—but felt absolutely no

pain. The operation lasted one hour and three quarters. The pulse remained soft and about 70 to the minute; the respiration regular and slow, sometimes falling to 9 per minute.

GROUP 4. *Affections of the Respiratory Passages and Pleuræ.*—In this group may be included the following: *obstructive conditions of the air-passages producing dyspnœa*—such, for example, as aneurysm pressing upon the trachea or main bronchi, tracheal stenosis, laryngeal diseases with stridor, etc.; *advanced chronic bronchitis and emyhysema,* with secondary cardiac changes; *chronic pneumonia; phthisis* in its middle or late stages; *pulmonary congestion and œdema* arising in the course of other diseases; *hydrothorax and pleuritic effusion; chronic pleural diseases* with secondary lung changes; and *empyema.* In all of the above-mentioned morbid conditions the patient's respiration becomes more or less seriously affected, and great care must be exercised in administering an anæsthetic. Chloroform is the most appropriate agent for producing anæsthetic sleep in patients of this group. Its vapor is less irritating than that of ether, and less likely to increase any catarrhal condition that may be present; while the stimulant effect which it exerts upon the respiratory movements is far less than that produced by ether. The respiration of a patient under ether, especially if the latter be given with a Clover's or Ormsby's inhaler, is deeper, quicker, and more liable to alterations in rhythm from spasm of muscles directly or indirectly concerned in breathing, than that which is met with under chloroform. From these, as well as from other considerations, it will be obvious that there are serious objections to ether in the class of cases under discussion. The greatest distress in breathing may be produced by the administration of ether to patients with bronchial, pulmonary, or pleural diseases. In pulmonary engorgement and œdema, whether arising in association with local morbid states or from limited expansion of the lungs dependent upon abnominal distention or from other (general) conditions, ether and the A.C.E. mixture are both contra-indicated. Cases of old-standing, pleural disease, even though one lung be completely crippled, tolerate chloroform very well; in some cases there may be no thoracic expansion whatever, the breathing being wholly abdominal, and yet threatening symptoms are rarely met with when this anæsthetic is used. Whenever it is practicable, the patient should lie on his affected side; but I have known chloroform well borne even when patients have been lying the reverse way, with the affected side uppermost. Cyanosis is readily produced in these latter patients if ether be employed. In patients suffering from dyspnœa dependent upon a narrowing of any part of the air-passages, the production of anæsthetic sleep is likely to be attended by considerable risk of life. This is especially the case if any bronchitic or pneumonic condition should coexist. In these patients natural sleep may be attended by cyanosis; indeed, it is sometimes impossible for the sufferer to obtain more than a few snatches of rest at a time. The greatest caution should be observed in producing general anæsthesia in patients thus afflicted. When natural sleep is attended by cyanosis or is productive of urgent dyspnœa, no anæsthetic can with safety be administered. Still, in cases, for example, of rapidly enlarging innominate aneurysm, the choice may lie between allowing the patient to die of asphyxia and asthenia, and tying the carotid and subclavian arteries. The risk should, in such a case, be explained to the patient or his friends, and only moderately deep anæsthesia should be produced. Respiration becomes in these patients a more or less voluntary act, and with the abolition of consciousness those muscles which have hitherto been instrumental in keeping the sufferer alive are no longer called into action, and the patient is made to fall back on his ordinary muscles of respiration, which may be quite inadequate for the maintenance of breathing when an obstruction to the entry of air exists. Chloroform should be the drug selected, and it should be administered very slowly and cautiously. It must be borne in mind that, should breathing fail, very little good may result from artificial respiration, because it may be impossible to force the air past the obstruction. Tracheotomy would of course save the patient if the position of the obstruction allowed of its performance.

GROUP 5. *Renal Disease.*—It is practically impossible for the administration of anæsthetics, especially in hospital practice, to ascertain the presence or absence of renal diseases in most of the cases that come under their care. It is nevertheless desirable to make inquiries in suspicious cases,

for ether has been known to increase pre-existing nephritis, and in some cases uræmia is said to have resulted from the use of this anæsthetic. It must be borne in mind that most patients with Bright's disease suffer sooner or later from œdema, not only of the extremities, but also of the lungs and pleuræ; and such patients might, apart from their renal condition, be seriously effected by ether. My own experience in this particular class of case has been sufficient to enable me to corroborate the observations of others. I can only recall one case of advanced renal disease. The patient was a lady, aged about forty, who had become extremely anæmic, partly from the existence of chronic Bright's disease and partly also from uterine hemorrhage. I was informed that the aortic disease which complicated the case was due to atheromatous valvular changes which were secondary to the renal affection. No pulmonary or pleural œdema appeared to be present. I decided to give the A.C.E. mixture, and its administration was attended by the best results. The feeble and diseased heart, coupled with the absence of pulmonary œdema, seemed to me to render the administration of a small amount of ether admissible in this case.

I venture to point out the fallacy of employing one anæsthetic for all cases. Such a practice is especially likely to be attended by disastrous consequences in those patients to whom I have referred. The administration of an anæsthesic is too often regarded as an unimportant matter; but it is desirable not to fall into the error of adopting such a view. It should rather be our aim to bestow as much attention as time will allow to the examination of patients about to be anæshetized, and, should any morbid condition be present, to exercise every precaution in producing surgical anæsthesia. A few moments' consideration in selecting the anæsthetic will usually lead to satisfactory results; whilst the indiscriminate employment of anæsthetic drugs may not only render it difficult to produce the necessary quietude for the performance of operations, but may even imperil the lives of the patients entrusted to our care.—*Lancet*, May 26, 1888.

The Effect of Opium on the Unborn Child.—Attention has previously been called to the transmission of the opium habit from mother to child. The possibility of acute poisoning of the fœtus from the admission of a medicinal dose to the mother is pointed out by Dr. C. E. Ruth, in the *Jour. Am. Med. Ass'n*, March 10, 1888. He says: Authorities lay great stress upon care in the administration of opium to very young children, but where can be found any thing in regard to its effects on the *unborn child* when administered to the mother? We are told that $\frac{1}{100}$ of a grain of opium has produced convulsions in children, and death by convulsions has been produced by very minute doses; also that the very young child is proportionately more susceptible to the action of opium than the adult; but is this susceptibility just developed at birth or does it exist before? I think it arises before birth, and that it is as strongly marked as it is after delivery; and, in the absence of the slightest evidence to the contrary, will proceed to furnish the evidence for my views, which are based on evidence elicited from observation of the effect upon the unborn child of the administration of large doses of opium to pregnant women for painful neuralgic affections, including gastralgia, and in threatened premature labor. The question would be immediately asked, what evidence could you obtain of any effect upon the unborn child? We are told that opium produces convulsions and death by convulsions in young children; then, may not the unborn child have convulsions when we overload the blood circulating in its unstable nervous system with a poison whose characteristic effect, in but a few hours at least, in case birth should take place, is conceded to be the production of convulsions?

In case convulsions do occur *in utero*, have we any possible way of determining the fact? Given a case of advanced pregnancy in which the physician is administering large doses of an opiate to the mother, and she begins to complain of tremendously violent motions of the child, such as she never knew before, and the physician, by placing his hand on the abdomen, detects motions of the child apparently many times more violent than usual, and so severe as to cause the mother to scream aloud in agony and say the movements are unbearable; this is repeated in numerous cases, and then he remembers the characteristic effect of the drug on young children; then he finds that these powerful motions in each case accompany the full effect on the mother of the administration of large

doses of opium ; it seems to me we are very slow in reasoning from cause to effect if we do not come pretty soon to some opinion in regard to their relation. Do we get a sufficient amount of opium into the mother's circulation in administering full medicinal doses to her to send a proportion large enough to the child to produce an effect on the child *in utero* that $\frac{1}{100}$ of a grain has been known to produce on the child soon after delivery, provided they are equally susceptible in the two states ? Estimating the weight of the mother at 120 lbs., and the child at 6 lbs., we have the child near birth representing about $\frac{1}{20}$ of the weight, and if we give opii gr. iv, at once or in divided doses near together, we have $\frac{1}{5}$ gr. of opium for the child's proportion of the gr. iv. If $\frac{1}{100}$ of a grain may produce convulsions in a young child after birth, may we not justly conclude that $\frac{1}{5}$ of a grain is very liable to produce the same result in the unborn child, especially when it is substantiated by such evidence as previously mentioned ?

If the child receives through the mother a much larger quantity than we would think of giving it after birth, should we not carefully consider the possibility of producing convulsions and death in the unborn babe by administering any thing like full doses of an opiate to the mother ? The proportion of opium which is the child's share being so large, of course we must conclude that the unborn children are daily getting poisonous doses of opium. In the prevention of abortion most authorities recommend opium as a sheet-anchor, but those of us who have used it for that purpose know too well how seldom it has given satisfaction in preventing premature delivery.

Let us consider for a moment, in each threatened abortion case, the possibility of producing the death of the fœtus, and certain abortion following the use of the very remedy we are using to prevent the same. We know that the number of abortions occurring during the administration of opium for their prevention is very great. In my practice the number of abortions occurring during its administration is as great as with rest in the recumbent position with the hips elevated, etc., without the use of opium.

I conclude that opium will not prevent abortion ; that it may be, and probably often is, an important factor in aiding or rendering more certain the completion of an already threatened abortion by causing convulsions in or death of the child.

When opium is administered to the mother for other painful affections, when there is no threatened premature delivery, is the death of the fœtus as frequent as the sized dose would lead us to suppose ? Any one can at once see that death by paralysis of the heart is the only one of these methods applicable to the unborn child, and that for that reason alone death *in utero* does not occur more frequently than it does from administration of opium to the mother ; for, as long as the mother, who is least susceptible to its action, still continues to breathe, oxygen will be supplied to the child if its heart still continues to beat. The heart of the fœtus has not the resistance to overcome in the lungs, by want of oxygenation of the blood, which the child has after birth. This, then, will account for the small number of deaths from administering opium to pregnant women when labor is not threatened or in progress, and will also account for the relaxed condition and feeble hold upon life that children have when born while the mother is considerably under the influence of an opiate. For, the moment a child is born, whose blood is already charged with opium, so soon do the influences of paralysis of the muscles of respiration manifest themselves, rendering the respiratory efforts feeble or entirely absent, and greatly lessening the child's chances for an independent existence.

Thomson (R. S.) on the Use of Nitric Acid, Ergot, and Chloral Hydrate in the Treatment of Whooping-Cough.—In all cases there was a decided tendency to improvement, apart from treatment, where no complication existed. The cases occurred in groups varying from each other in the severity of their symptoms.

Sixty cases were treated with dilute nitric acid in twenty-minim doses, administered every four hours, where the age was above two years, while under that age one half and one fourth of this dose was given. No improvement was noticed in the symptoms that could be decidedly referred to the use of the drug.

Liquid extract of ergot was used in the treatment of forty-nine cases. Ten minims were administered every four hours to patients under two years, and twenty

minims when the patient was older. No benefit was derived from its use.

Ninety-five cases were treated with chloral hydrate. Five grains were ordered every four hours to patients over two years, and two and a half grains under that age. No effect seemed to be produced upon the number of paroxysms, but their severity was distinctly mitigated. The tendency to convulsive seizures was reduced.—*Glasgow Med. Jour.*, May, 1888.

Dangers of Antiseptics.—Dr. Emil Senger recently read a paper on the influence of antiseptic remedies on the organs of the body, with special reference to operations on the kidney. It is well known that, after nephrectomy, or even nephrotomy, many patients die with symptoms of uræmia or anuria, even when it had been ascertained beforehand, by careful examination, that the other kidney was quite healthy, and capable of secreting the necessary amount of urea. Dr. James Israël, chief surgeon of the Berlin Jewish Hospital, has propounded a very complicated theory as to certain nervous sympathies between the two kidneys, whereby an operation on one may give rise to degeneration of the other. Senger has now proved, by experiments on rabbits and dogs, that our antiseptic remedies are the cause of these complications. He injected into the animals, when in perfect health, one tenth or twelfth part of the quantity of corrosive sublimate, carbolic acid, etc., which is sufficient to kill them. He then extirpated one kidney, and examined it microscopically, with the result that, in all cases, he found glomerulo-nephritis. There was exudation between the glomerulus and the capsule, and the epithelium of the tubuli contorti was almost entirely destroyed. He found also fatty degeneration of the liver, the spleen, the heart-muscle, etc. The various antiseptic agents were found to be injurious in different degrees, corrosive sublimate being the most dangerous, then the others in the following order: iodoform, carbolic acid, salicylic acid, boric acid. Senger therefore recommends surgeons to avoid antiseptics in operations on the thorax and abdomen, and urges them either to employ sterilized water, after the manner of Mr. Lawson Tait, or a solution of salt By bacteriological and pathological researches he proved, first, that this kills the streptococcus pyogenes aureus in twenty-eight minutes, and that the effect is independent of the degree of concentration, for a 5 per cent. solution is just as effectual as a 20 per cent. Secondly, he claims to have shown that chlorate of sodium does not in any way injure the organs, and that no dose is strong enough to kill any animal. —*Br. Med. Jour.*, May 19, 1888.

MISCELLANEOUS.

Hill (H. G.) Poisoning by Chlorate of Potash.—Lydia M——, a precocious little brunette, four years of age, about ten o'clock on the morning of March 19th, discovered in a closet a half-filled bottle of compressed tablets of chlorate of potash, and immediately conceived the idea of playing doctor with her two-year-old brother. The boy was doctor and the girl patient. With commendable care the doctor saw that the patient actually swallowed each dose that he ordered, and sometimes, by way of encouragement, took a tablet himself. The little girl is unusually intelligent for her years, and, from her straightforward account, it is probable that she ate at least two thirds of the quantity, and possibly more. No scattered tablets could be found, and only one remained in the bottle. It is estimated, after a careful comparison with other bottles of the same size, and after weighing the tablets, that she must have taken at least eighty grains. The mother noticed at dinner that her appetite was poor, but thought nothing of this fact at the time. Early in the afternoon she began to complain of headache, which rapidly increased in severity and was accompanied by nausea. By supper-time she was quite feverish, unable to eat, and extremely listless. High temperature, persistent nausea, great restlessness, hallucinations, and the voiding of a quantity of urine much above the normal were the prominent symptoms during the night. Unfortunately she was not seen at the worst, so that the maximum temperature and pulse rate cannot be stated. Toward morning there was a marked improvement, but upon attempting to dress her after breaksfast she was found to be too weak to stand. Marked pallor was observed at this time, and continued for several days; but at the end of three days she had regained her usual condition, and now, after two weeks, seems as well as ever. The effect of the drug on the child's complexion is worthy of notice.

Previously the skin had appeared quite muddy; but on convalescence it became unusually clear and transparent, and this transparency still continues. In fact, the mother asked whether chlorate of potash could not be utilized as a cosmetic. The boy was affected with similar symptoms, but in a much less marked degree.—*Med. Record*, June 9, 1888.

Terrillon on the Treatment of Goitre.—This surgeon washes the thyroid region carefully with alcohol, and then with a five-per-cent. carbolic solution. The patient then causes the veins of the neck to stand out so that they may be avoided in the operation. A trocar is then plunged deeply into the tumor, and if neither air nor blood appear, eight to twenty drops of tincture of iodine are injected, the instrument is withdrawn, and the wound is closed with iodoform collodion. Some swelling follows for three or four days, and a hard nodule of fibrous tissue remains. The course of the disease seems to be favorably modified by this treatment.—*Le Courrier Méd.*, May 19, 1888.

Bazy on Gastric Dilatation in its Relation to Surgical Proceedings.—The author thinks that gastric dilatation is more common than is generally supposed, and that the condition, when it exists, is very favorable to the development of infectious micro-organisms. In this way he explains many otherwise inexplicable septic phenomena. As a result of his studies, he strongly advises that gastro-intestinal antisepsis precede any surgical operation in such case.—*Le Courrier Méd.*, May 19, 1888.

BOOK NOTICE.

The Pathology, Diagnosis, and Treatment of the Diseases of Women. By GRAILY HEWITT, M. D. Lond., F. R. C. P., Professor of Midwifery and Diseases of Women, University College, and Obstetrical Surgeon to the Hospital, etc.

A new American from the fourth revised and enlarged London edition. With 236 illustrations. Edited with notes and additions by H. MARION-SIMS, M.D. New York: E. B. Treat, 1887. 3 vols., pp. 1010.

The appearance of another American edition of Dr. Hewitt's work speaks well for its popularity in this country. It has been largely amplified in scope, but contains few new ideas, as the author has found the experience of ten years a still stronger foundations for the opinions long since expressed, and which have constituted him the great apostle of the "mechanical theory" of uterine pathology. Mal-nutrition of the uterus is regarded as the great predisposing cause for uterine displacements and distortions; and the softened condition of the tissues of that organ,—the "chronic metritis," "congestion," etc., of other authors—is its local manifestation. Little or no attention is given to the influence of inflammatory contraction of the uterine supports as an etiological factor in these affections, both as to causation and symptomatology; nor to the consequent obstruction to the venous circulation as the primary cause of congestion of the nulliparous uterus. That the mere elevation of a displaced uterus may relieve both congestion and symptoms without change of the distorted form of the organ, through relieving the drag on the contracted ligaments and the resulting venous obstruction, forms no part of Dr. Hewitt's system as promulgated by him, and the influence of this fact on the result of his treatment is quietly ignored, or but casually mentioned. Like the majority of his compatriots, the author regards the sound as most valuable in diagnosis and treatment of uterine displacements, treating of its use as though it were routine practice, and giving no contra-indication to its introduction but the existence of pregnancy. In America, the gynæcologist who is dependent on a sound, or even a delicate probe, for diagnosis, save in most exceptional cases, is regarded as the merest tyro in his art; and the use of the instrument as a repositor in displacements, with no regard to the condition of the periuterine tissues, is proven to result in active inflammation of the American pelvic peritoneum. This is especially so, if the sound be used nearly straight, as the author prefers to use it. He gives this subject a general notice by the *naïve* remark. "Indeed, I have known cases . . . in which the sound alone could not be used without risk of inducing an attack of pelvic cellulitis," but the student, following his advice, would only learn by such a result, that he had met with a case not to be treated by the sound. If our transatlantic brethren would cultivate the bimanual method of pelvic exploration with the patient on the back, and discard their favorite left-lateral position, they would soon find so little use for the sound, that the instrument would be stowed away with the porte-caustic and cautery irons. The author's well known ideas as to the value of anteflexion pessaries are strongly urged, when used with the sound and dilator.

Important additions,—in regard to the influence of fluxions of the gravid uterus on the nausea of pregnancy; the uterine cause of hysteria and other neuroses; the effect of lacerations of the cervix and the value of Emmet's operation; the dietary treatment of uterine myoma; as well as the appendix, treating of differential diagnosis and containing an analysis of the individual symptoms of uterine disease, are noted. The editor has wisely confined his notes to matters of practice, almost entirely ignoring theoretical opinions. The life-size cuts of the uterus and appliances used in the treatment of its displacements, will be of great assistance to the student in his efforts to comprehend that somewhat obscure subject to the beginner.

While not in accord with many of our most cherished beliefs, the work should be carefully studied—if only for that reason,—for a consideration of the strong arguments of the author will lead to more liberal ideas and increased facilities for the treatment of the conditions we often find so obstinate.

J. S. HAWLEY, M.D.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital.

VOL. V., NO. 25. June 21, 1888. WHOLE NO. 73.

CONTENTS.

	PAGE
Occasional Report on Diseases of the Ear and Eye	293
Therapeutics	295
Medicine and Pathology	299
Surgery	304

OCCASIONAL REPORT ON THE DISEASES OF THE EAR AND EYE.

BY A. T. MUZZY, M.D.

Objective Tinnitus Aurium.—Dr. Gerould reports a man thirty-two years old, a farmer, of dark complexion, medium height, a little below average weight, and not especially nervous, but of good health, in whom there had been for the past six months, not only a subjective ticking noise, but an objective one as well. About three years ago patient had dizziness after working in hot sun; was troubled for several months. Several years ago had trembling spells on slight exertion for short while; has had some dyspepsia. These have all disappeared. The peculiar tinnitus came on six months ago and has been constant since, only ceasing during sleep. Hearing is nearly normal. Examination shows a normal condition of drum and canal. The tinnitus is audible six feet away in a room not perfectly still and beats about 160 to the minute. It is nearly, not quite, regular and distinctly audible in both ears. Once in a while it stops for a few moments. J. Orne Green, in commenting on the case, referred to different forms of objective tinnitus, believing it to be produced, as did Dr. Gerould, by contraction of the tympanic muscles. Dr. Green mentioned two varieties of objective tinnitus: one, the vascular, very rare; and the other, the muscular, already described, of which he had seen eight cases, two of which had been voluntary.—*Boston Med. and. Surg. Jour.*, Feb. 2, 1888.

Rumbold (F. M.) on an Unusual Case of Tympanophony.—A lad of seventeen years, for epistaxis, had had his nose sprayed with boric solution, causing much pain and swelling. This was followed by the echo of his voice. Under treatment the swelling subsided. The drums, which had been forced forwards, regained their normal positions, and the tympanophony ceased after the sixth treatment. It is unusual for this affection to occur under thirty-five years. Its cause is also unusual, and the rapidity of the relief is quite seldom seen.—*St. Louis Med. Jour.*, Dec., 1887.

Munson (G. S.) on Osseous Formation within the Eye with Report of an Unique Case.—Examination of enucleated eyes, often shows bone formations. These have been developed uniformly from the choroid. There are a few cases recorded, however, where bone has been located in the lens capsule, or attached to the ciliary body, or in a thin septum across the eye directly behind the lens. The case reported was that of a young man sixteen years old, showing sympathetic ophthalmia associated with a useless irritable globe destroyed six years previously by purulent ophthalmia and corneal ulceration. Dissection of the enucleated globe showed a small quantity of yellowish fluid in the vitreous chamber and a bony mass, cone-shaped, its base somewhat quadrilateral, in connection with the posterior surface of the iris, and its apex reaching so as nearly to touch the optic disk. Its base was strongly attached by strong connective-tissue bands with the degenerated iris and

ciliary body, while its sides are entirely free. Its dimensions are, circumference 25 *mm*, from base to apex 12 *mm*, widest diameter of base 10 *mm*, narrowest diameter of base 8 *mm*. The writer thinks that early in the course of the purulent ophthalma, six years before, the retina was detached, taking a funnelled position, with attachments at the ciliary body and the optic disk, which became filled with connective tissue from the ciliary circulation. The connective tissue in time was transformed into true bony tissue, as was proven under the microscope.—*Albany Med. Annals*, April, 1888.

Hobby (C. M.). on Operation for Pterygium.—One more method is added to the many already used in dealing with this very refractory disease of the eye. This method is presented by Dr. Hobby after first having employed it for over six years and in one hundred cases of pterygium or rather operations for pterygium. Young has shown that the affection follows one of the meridians of the globe, and most frequently that which is most exposed to external influence. The method described aims, as many do, to change the axis of the growth away from the cornea, so that in further increase it may not encroach upon that surface; so that, instead of pointing to the pole of the cornea, this axis is a tangent of the lower border of the cornea. By this means the whole cicatrix is in a less exposed position, being covered by the lower lid.—*Am. Jour. Ophth.*, April, 1888.

Fick (E). on Contact-Lenses.—An editorial in the *Medical News*, Phila., May 12th, refers to the attempts of Dr. Fick, of Zurich, to correct irregular astigmatism by the use of a glass shell inserted like a watch crystal or an artificial eye immediately in front of the affected cornea. The intervening space being filled with fluid, the irregularities of the corneal surface are practically substituted for by the regular curve of the "contact-glass," with the result in one case of raising the vision from $\frac{1}{10}$ to $\frac{6}{10}$ of normal. His experiments were begun with puppies. To prevent irritation and clouding of the fluid, a two per cent. solution of grape sugar is used. With this precaution the shells can be worn for eight or ten hours. It is applicable only in a limited number of cases: not only cases otherwise incorrigible, but conical cornea, and other extreme errors of refraction where good central vision is attained by glasses in the ordinary way. Any desired curve may be given to the artificial cornea, so as to make it useful for regular as well as irregular ametropia. It is hardly more fragile than an artificial eye; the glass is practically invisible, moves freely with the eye, and has fortunately a larger field of clear vision to give than the spectacle. The editor refers to previous experimentation on this method by Young early in the century.

Moore (W. O.). on Ocular Symptoms in Diseases of the Spinal Cord.—The symptoms especially referred to in the article are optic atrophy, ophthalmoplegia (interna especially), and nystagmus, with pupillary changes. These ocular symptoms are not the effects of, but the associates of spinal cord disease, yet they are always the result of degenerative processes in the cord. Tabes dorsalis has a larger number of eye symptoms than any other spinal degenerative process. In injuries of the cord, traumatic caries of the spine with pressure upon the cord, very frequently loss of accommodation, asthenopia, and in a few cases optic neuritis are found. In tabes optic neuratrophy generally appears in the very early stages, loss of patellar reflex alone preceding it in many instances. Authorities differ as to the relative frequency with which it is associated with this disease: Dr. Moore is inclined to side with Dr. Nettelship's statement of 50 %. This amblyopia of tabes often exists for a number of years before other symptoms appear, and rarely comes on in the late or advanced stages. It commonly attacks one eye before the other. This disease shows its presence by diminution in the acuteness of vision; the field, which is at first normal, slowly and irregularly contracts. The color field usually suffers first, the colors fading out in the order of green first, then red, yellow, and finally blue. The ophthalmoscope shows a dirty disk, and finally the white atrophy with small arteries, while the remainder of the fundus may be normal. Sometimes no abnormality can be detected with the ophthalmoscope and yet there be complete blindness.

Pupillary changes are the next most frequent ocular symptom in locomotor ataxia. And they are as frequent here as they are rare in other spinal diseases. Of the different kinds of pupillary change, that in

which there is loss of reflex action to light, while still contracting or dilating for accommodation, is the more frequent—reflex iridoplegia. With this is associated the loss of dilatation on stimulating the skin of the neck. The rarest is loss of accommodation without loss of reflex action. Skin reflex is generally lacking when light reflex is absent. To bring out the test of dilatation through the skin reflex, care should be taken to shade the eyes examined by bright light and caution the patient against voluntary movement during the test. Nystagmus is associated with tabes, though rarely. But it is usually found with multiple sclerosis, being irregular and rotatory. In general paresis of the insane the pupillary symptoms are very generally present, the most frequent form being reflex dilatation to cutaneous stimulation. Loss of action to light comes next in frequency. Optic nerve atrophy is sometimes met. Besides nystagmus in multiple sclerosis we have temporarily diplopia and amblyopia, though this does not lead to complete blindness as in locomotor ataxia. The paralyses of the external muscles of the eye after or with spinal disease are reserved for a separate article.—*Jour. Nerv. and Ment. Diseas.*, April, 1888.

THERAPEUTICS.

Fussell (M. H.) on the Hypodermic Use of Nitro-Glycerine in Heart Failure.—Mrs. G., aged sixty-three, subject to dyspnœa, palpitation, and recurring œdema for several years, had a slight cerebral hemorrhage two years ago. Her mitral valve was diseased. Under treatment with digitalis and strophanthus, the case progressed favorably until January, 1888. Suddenly, on the night of January 2d, the patient, after having passed an unusually good day on the first, was seized with urgent dyspnœa, so that she was unable to lie down, and she became so sick that I was summoned about three o'clock in the morning. I found the patient unconscious, both her lungs full of bubbling râles, her pulse ninety and weak, but remarkably regular considering the patient's general condition. Her breathing was stertorous, and could be heard in the next room.

The patient had been taking nitro-glycerine before the attack, so I procured the bottle, gave a hypodermic injection of two drops, and retired from the room to await the death of the patient. In just twenty minutes from the time of the injection the attendants called out that our patient was dying. I went into the room, and, instead of finding her dead, saw that she had raised herself in the chair in which she was propped, and was evidently conscious. I spoke to her and received an intelligent answer. Her pulse had become still more regular than it had been before, and her breathing less labored. I immediately repeated the injection of nitro-glycerine, and in the course of an hour, had the satisfaction of seeing my patient's condition so much improved that she was able to talk and could lie down without trouble, while the râles had disappeared from all parts of her chest, except the extreme bases of the lungs. In a few days the condition of the woman was quite as good as it was before the attack, and she was able to go about the house comfortably.

A man, forty-five years old, had had a remarkably light attack of typhoid fever, his temperature never rising above 102°, and by the end of the second week it had reached the normal point.

On the sixteenth day of the disease the patient awoke in the morning saying he felt better than he had felt on any previous day. Notwithstanding the repeated warnings he had received not to make any undue exertion, he arose suddenly from his bed, reached under it for the commode, and immediately fell back in a faint. I was sent for, and on my coming found his pulse exceedingly irregular and weak, and so rapid that it could not be accurately counted; his face cyanosed; his hands and feet cold; his lungs full of râles. I immediately administered two drops of nitro-glycerine hypodermically, and applied heat externally. In a few minutes I had the satisfaction of seeing my patient's condition begin to improve. His pulse became more regular, though still exceedingly rapid, and his breathing less labored. Stimulants were then administered, and he gradually improved for two days, when death took place from another attack of heart failure, following a persistent straining at stool.

A man, fifty-nine years old, an habitual drinker, and the subject of mitral disease of the heart, after retiring on the evening of May 1st, was suddenly attacked with urgent dyspnœa. He arose, was propped in a chair, and tried vainly to obtain relief

from his oppression. I saw him one hour after the beginning of his attack, and found his pulse irregular, rapid, and weak. His breathing was rapid, his face cyanosed, and his lungs filled with bubbling râles. He was conscious, but unable to speak connectedly. I immediately injected two drops of nitro-glycerine hypodermically. This was followed in a few minutes by marked relief. In half an hour I injected one drop. At the end of three quarters of an hour the patient's pulse was regular; he could talk easily; his breathing was almost normal. I then ordered whiskey and digitalis to be given during the night, and in the morning found him exhausted, but almost in his normal condition.

In all of the above cases death seemed imminent. In the first case the woman would certainly have died very soon had she not received prompt relief. The treatment by the hypodermic use of nitro-glycerine acted so promptly that the bystanders were very much impressed, and the physician was almost as much astonished as they were.

I have treated similar cases with stimulant hypodermics of whiskey and digitalis, but sometimes death was not averted, and when it was the relief was long delayed.

One who has seen cases of heart failure treated in the usual way can have no conception of the brilliant results which may be obtained by the hypodermic use of nitro-glycerine. The treatment has the great advantage that it is harmless in any event; and I believe it should always be tried, though, of course, not to the exclusion of other well known methods of relief.—*Med. and Surg. Reporter*, June 2, 1888.

Robson (A. W. M.) on the Use of Silico-Fluoride of Soda as an Antiseptic.—After an extensive and varied trial of the fluosilicate the author concludes that it is an efficient antiseptic, the powder is a strong irritant, even acting as a caustic if dusted on a raw surface, and is, therefore, in that form, unavailable for surgical purposes. A solution of one grain to an ounce of water is quite strong enough for ordinary purposes, in that strength being apparently unirritating.

A solution of ten to twenty grains to a pint may be safely used to syringe out closed cavities, even where one cannot be certain of all the fluid returning. The soluion is unirritating to the hands, which is no small advantage to those operators whose fingers are easily irritated by the ordinary antiseptic solutions.

The solution acts on the glaze of porcelain after long use, and corrodes steel instruments, but sponges are unaffected by it. The addition of bicarbonate of soda to the solution diminishes its action on steel.

A very convenient and comfortable antiseptic poultice may be made by soaking absorbent wool in a hot solution (ten grains to the pint), wringing it free of excessive moisture, applying to a wound, and covering with gutta-percha tissue.

Although for ordinary surgical work he still employs perchloride of mercury, in all cases where there is danger of absorption, as in syringing out cavities, he employs the newer drug.

He thinks it will prove to be of great use to obstetricians, it being both safe and efficient.

It acts very efficiently as a deodorizer to the hands. After examining carcinoma of the uterus or rectum, by washing and steeping the hands in a saturated solution, the odor is removed very efficiently.—*Br. Med. Jour.*, May 29, 1888.

Antipyrin and Sea-Sickness.—Even at the risk of checking the vogue which antipyrin at present possesses for the prevention of sea-sickness, we cannot refrain from narrating the experience of Dr. Rollet, who, with a numerous company, crossed from Marseilles to Oran in March last, on his way to the Congress for the Advancement of Sciences. M. Bonnet having just called attention in the French Academy of Medicine to its effect in subjugating sea-sickness, a large number of intending travellers resolved to put its virtues to the test. As soon as the vessel began to roll and pitch, the passengers on the quarter-deck manifested the first symptoms of the dread visitor, and sixty of them at once took from 15 to 45 grains of antipyrin. The movement of the vessel increased, and many of them became giddy and sick and disappeared downstairs. At dinner only 15 out of 20 passengers put in an appearance, and most of them continued to suffer until they set foot once again on *terra firma*. Many of the persons who tried antipyrin had dieted themselves for some days previously, and some had even antedated the antipyrin treatment. On the return journey the weather was finer, but a certain number still retained enough con-

fidence in the drug to give it another trial, but without any better result. In many instances the ingestion of the drug appeared *per se* to give rise to nausea and vomiting, and the sufferer could not be prevailed upon to take any more. The officers of the ship had seen antipyrin tried before, and were unanimous in their depreciation of its value. They relate that on one occasion a passenger had taken six grammes (100 grains), with the effect of stopping the sickness, it is true, but with the result of inducing a very alarming degree of prostration. On the whole, this extensive trial of antipyrin as a specific for sea-sickness proves that Neptune has not yet abdicated his empire over our alimentary canal when we venture on his domain.—*Med. Press*, May 23, 1887.

Gardner (W. H.) on Oxalate of Cerium in Sea-Sickness and Other Disorders.—The author confidently asserts that oxalate of cerium administered in ten-, fifteen-, or twenty-grain doses, every two or three hours, in about one tablespoonful of water, will cure more cases of sea-sickness than champagne, bromide of potassium, chloral, or any thing else he has ever tried. He states that it will cure, or materially relieve, seventy-five per cent. of all cases that come up for treatment.

He was induced to use this remedy, in these seemingly large doses, by a patient with gastritis following a debauch. He had given him pounded ice, chloral, bromide of potassium, creosote, hypodermics of morphine, mustard over the stomach, and all that the books prescribe or the ingenuity of the profession has devised; he then prescribed six powders of oxalate of cerium, five grains each, one powder to be taken every two hours in a tablespoonful of water. He went to see him six hours afterwards, and found his stomach quieted, and he was drinking some iced milk. He found he had taken the first powder (five grains) and had thrown it up, so he took the remaining five powders at one dose (twenty-five grains) and it quieted the stomach at once, and he got well immediately. Later he was called to see a man who had been shot in some little discussion over a game of cards; the ball—thirty-one calibre—entered on the right side of the abdomen, ranging upward, backward, and to the left, not wounding the bowel, but probably some branches of the solar plexus, and lodged somewhere in the muscles to the left of the spine; there was little or no hemorrhage (external), and when he recovered from the shock, under the use of ammonia, brandy, and digitalis, the most persistent symptom was the continuous and exhaustive vomiting, which, however, was controlled in about twenty hours by the use of ten grains of oxalate of cerium in a tablespoonful of water every three hours. The man made a speedy and good recovery, and is still driving a stage-coach in Arizona.

He has used the oxalate in hundreds of cases of sick headache, and the morning sickness of pregnancy, and almost always with marked success; but it must be used in at least ten-grain doses for adults, to do any good. He has also found it very useful in relieving the cough of phthisis in these doses. He has never seen any unpleasant effects from its administration in twenty-grain doses every three hours.—*Med. Record*, June 2, 1888.

Cheesman (H.) on Oxalate of Cerium as a Remedy for Cough.—In over half of the author's trials with the oxalate decided relief to the cough, and often to other symptoms, has occurred; in some of them only moderate effects were apparent; while in a few the drug has proved nearly or entirely ineffective. Some cases do not yield readily to any measure, but often in them the oxalate has proved, after all, most satisfactory. It should be persisted in for a number of days, in increasing doses, before being abandoned as useless.

The oxalate of cerium has proved a remedy for cough in every stage of phthisis, but, perhaps, the best effects are seen in the irritant cough of the earlier stages. It is impossible to know just how much of the cough of advanced stages is due to irritation in freshly invaded portions of lung, or to gastric and hepatic disturbance. However this may be, he has often noticed a hoarse, deep, and harassing cough in the third stage lose its harsh character under the use of the oxalate, after which the cavities were emptied with less effort. It is an error to suppose that violent and exhausting cough is best left unchecked, because there is abundant secretion to remove. The cough of laryngeal phthisis has been successfully treated with it, also other forms of laryngeal cough. Dr. George Bayes reports, that "a chronic laryngeal cough of a croupy quality was entirely and permanently relieved by its

use." In the vomiting of laryngeal and pulmonary phthisis it is beneficial. In chronic bronchitis it has been used with good results, and in cough associated with an asthmatic condition, of phthisis, or of bronchitis, it may relieve both the cough and dyspnœa; and it has proved effective in spasmodic asthma, as already mentioned. In one instance a very distressing cough in empyema immediately subsided under the use of the oxalate, after which the pus which was being discharged through the lungs was expectorated with less effort. It has been used with some effect in whooping-cough and in the cough of measles, and also in cases of cough of obscure origin without assignable lesion. It has been recommended chiefly in chronic cough, but in acute bronchitis it often moderates the cough and lessens discomfort.

He has never seen any dangerous symptoms attributable to the drug, although he has given twenty grains several times in one day. A sensation of dryness in the mouth and throat is the only symptom noticed by patients, and they ceased to mind this after the drug had been taken a few days. Generally patients sleep and rest better while taking the oxalate, and in a few instances moderate drowsiness has accompanied its use.

Administering the drug dry seems the most satisfactory method. The effects seem better when it is given on an empty stomach and in fairly large doses, rather than the same quantity distributed in smaller ones. The initial dose being five grains, to be given early in the morning, at bedtime, or both, with intervening ones as required, may be increased, unless relief is obtained, to ten grains, or more, several times a day. Large doses may succeed where smaller ones have no effect, or the cough, being for the time relieved by small doses, may return and be again moderated by increasing them. It loses its effects with continued use in some cases altogether, while in others the effects last so long, at least, as it is found necessary to employ the remedy. Its benefits may be prolonged by stopping or reducing the doses as soon as relief is obtained, and resuming them on return of the cough. In most cases when it employed opiates may be dispensed with.—*Med. Record*, June 2, 1888.

Money (A.) on the Treatment of Broncho-Pneumonia in Children by Application of Ice.—The cause of the bronco-pneumonia does not, in my experience, influence the employment of the ice-bag. It may be used with much success even in cases of broncho-pneumonia secondary to tracheotomy, but still more favorably in cases of influenza and measles. The smaller the child the more marked are its effects. In very small infants under one year of age the ice-bag may be placed on the head, the hair having been previously thinned and shortened if necessary. The treatment to be successful must be carried out with a will and systematically. As a general rule, the rectal temperature affords the best guide to the application of cold, and those acquainted with broncho-pneumonia well know the highly marked remittent or almost intermittent character of these affections. Ice-bags have the drawback that they often give rise to a little wetting of the child, but this has not, in my experience, proved injurious to the patient. Leiter's tubes have been tried, and have some advantages, being especially valuable when an intelligent nurse is in attendance. The condensation of moisture caused by the cold is of course inevitable, but this wetting may be rendered harmless by covering the ice-bag or Leiter's tubing with a layer of wood-wool or compressed moss. In severe cases, where a rapid effect is required, two ice-bags have been placed on head, and one over the chief seat of consolidation in the lungs. With a little management it is not difficult to keep these in place; certainly not when the neuro-muscular prostration is marked, as it almost always is in severe cases. The chief merits of this treatment consist in the maintenance of the strength, not only of heart, but also of the respiratory centres and of the nervous and muscular systems. Although otitis media occasionally occurred, yet this has been more frequent than in cases treated without cold. Albuminuria is not rendered worse by the cold, nor have any cases of hæmaturia been observed. The urine has, at some trouble, been especially collected and tested in small infants. The duration of the disease is, on the whole, shortened. Convalescence is almost invariably rendered more rapid, doubtless because of the conservation of the child's energy.—*Lancet*, June 2, 1888.

Boyd (J. M.) on Diphtheria and Veratrum Viride as the Basis of

Treatment.—In accordance with the views of the author the treatment of a case of diphtheria should be conducted as follows:

First mop all the membrane in sight with this standard mixture: Liquor ferri sub. sulph., 1 drachm; glycerine and water, 4 drachms of each. Don't use a camel's-hair brush. Moths eat off some of the hairs, and the stubs puncture the softened mucous membrane and carry poison to the cellular tissues beneath, which deepens and extends the local lesion, but use a cloth mop on a slightly elastic stick. A fresh mop should be made for each application. Then give to an adult a teaspoonful of saturated solution of potass. chlorate, with three drops of Norwood's tincture, every two hours, the veratrum to be increased one drop, if necessary, each time until the pulse is brought down to 60 to 70 per minute.

It is usual to find that when once lowered a less quantity will hold it down. After each dose give eight grains of sublimed sulphur, to be swallowed dry, or better still, to be blown into the throat with a tube. Rub the outside of the throat with kerosene-oil or some other irritant, and give thoughtful encouragement to a simple, nutritious animal food.

The application of the mop may be made at only alternate times that the veratrum is given, if the membrane is detached.

It is proper that a statement should be made in evidence of the good effects of calomel in grain-doses every hour in croupous diphtheria.

It may be of interest to mention the quantity of Norwood's tincture required to control the pulse in this disease. It is tolerated well, as a rule, but in case nausea is present it must be increased cautiously and omitted occasionally. The purpose should be to increase from a moderate dose for the age of the patient, to whatever is necessary to bring the pulse to 70 or below in an adult within six or eight hours.

In a child aged four months, three and a half drops were reached before any impression was made, and then the pulse dropped to twenty-four beats per minute. A few drops of whiskey threw off the influence sufficiently for comfort in half an hour.

A child, two years of age, required five drops, and another, seven years, seven drops every two hours to bring the heart under control. These were the largest doses found necessary, and in all of them the morbid condition was steadily lessened under the conditions of slowed heart. All cases required less to control and keep a steady action than was necessary to first bring about sufficient effect.

A decided and abrupt slowing of the pulse accompanied by more or less distressing nausea is always followed by a mitigation of subsequent symptoms. And so, too, in scarlatina, but not in so marked a degree.—*Med. Record.*

MEDICINE AND PATHOLOGY.

Farnham (E.) on Typhoid Fever in a Child Three Years of Age.—October 3, 1887, the child's father, who had been feeling poorly for some days, went to bed and developed an attack of typhoid fever of medium severity. November 1st he was convalescent, and about this time the daughter complained of being tired after going out, was fretful, and indifferent to what usually interested her, and in the afternoon was hot and flushed.

She was put to bed November 7th. During the continuance of her illness there were diarrhœa, scanty urine, slight tympanites, complete anorexia—so that at times food had to be poured down her throat,—thirst, nausea, vomiting once or twice, mild delirium on a few nights, slight bronchitis throughout the entire fever, enlarged spleen, rose spots coming out once, and few in number.

On the sixteenth day the temperature became normal, and for the next ten days was always subnormal, falling as low at times as 95.2°.

Through the period of low range of the thermometer, beyond a slight irregularity of the heart's rhythm, the child developed no unfavorable symptoms, but gained steadily in strength, slept well, and ate in a satisfactory manner.

The author asks: Is a period of thermometrical depression after typhoid fever common in young children, and unnoted because not looked for, or is its occurrence exceptional?—*Boston Med. and Surg. Jour.*, June 7, 1888.

MacDonnell (R. L.) on Typhoid Fever vs. Tubercular Peritonitis.—The case in question where a doubt existed

as to the correct diagnosis was a girl aged eighteen years, who had always been a somewhat delicate child, though during the five years which preceded her last illness she had never been seriously ill, and a history of tubercle was not to be found in the family. On the 2d of June, 1884, she took to her bed, complaining of general lassitude. For the preceding fortnight she had not been well, though she could not explain from what she was suffering. No pain anywhere; rather pale; gums and conjunctivæ somewhat anæmic; pulse 100; regular temperature 100° in the morning; tongue slightly coated; appetite very poor; bowels somewhat confined; no abdominal tenderness. Typhoid fever was prevalent at the time; indeed some cases had occurred in the same terrace in which she lived.

The subsequent course of the disease is thus summarized:

First week. Very severe headache, for the relief of which the cold coil was kept applied; tympanites very troublesome. On one day the catheter was used to relieve the retention of urine. There was a complaint of pain in the right side of the abdomen. Morning temperature, 101° and 102°; evening temperature, 103° and 104°: pulse, 120 to 130; respirations, 40 to 45. Bowels moved once or twice a day. No fever spots.

Second week. Headache; abdomen less distended and less painful. Cough present, but not so troublesome; morning temperature, 100° and 101°; evening temperature, generally 102°; on one evening, 103; pulse, 120 to 138; respirations, 40 to 54; diarrhœa (5 stools) on two days of the week.

Fourth week. Condition in the main unchanged; cough slight, but persistent; abdomen tpmpanitic; a moderate hemorrhage from the bowels occurred one day; temperature shows no sign of falling, reaching in one day 104°, and usually touching 102° at night, never falling below 100° in the morning; pulse, 120 to 130. Slight diarrhœa on one day.

Sixth week. The temperature is lower, falling to normal once; abdomen, distended still; no diarrhœa. The apex of the left lung is suspiciously dull, and a few small moist râles were heard. The diagnosis of typhoid seems now uncertain.

For the remainder of the illness the temperature remained unchanged, and was high to the last; death occurring in the tenth week, being mainly the result of debility, accelerated by the persistent vomiting which set in during the last fortnight. The abdominal distension persisted.

Autopsy—Tuberculär deposit was found throughout the body, in the Fallopian tubes, in the peritoneum, the pleura, lungs, and kidneys. There was no evidence of recent typhoid fever.—*Canadian Practitioner*, June, 1888.

Fenwick (B.) on Cardiac Degeneration from the Pressure of Abdominal Tumors.—In a series of papers on the above subject the author has pointed out the fact that serious structural changes of a degenerative character and consequent cardiac weakness may result from prolonged embarrassment of the heart by the upward pressure of abdominal growths. At the close of his last article (*Lancet*, June 2, 1888) he points out the very important practical lessons which the subject seems to teach: "If there is reason to believe that the long-continued pressure of intra-abdominal cysts causes most serious and fatal form of heart disease, surely we ought most strongly to advise the early removal of the danger-producing cause; and I would the more earnestly insist upon this point, because abdominal surgeons, I believe, prefer postponing an operation as long as they possibly can. 'Ovariotomy should not be performed while the tumor is small,' says Barnes, 'nor until the constitution has undergone some degree of impairment.' Sir Spencer Wells says he 'prefers waiting.' Keith writes: 'I prefer operating when the tumor is large, and when the patient has suffered a good deal.' I feel sure that when it becomes generally accepted that the heart is receiving a serious, and, moreover, an irreparable, damage while the peritoneum is being squeezed into the insensibility apparently dear to surgeons, the above opinions will be considerably modified by their distinguished authors. A second practical point is that where removal of the tumor is not practicable the pressure dangers should be prevented by early, and if necessary by repeated, tapping."

Conclusions of the Myxœdema Committee.—At the last meeting of the Clinical Society of London, May 25, 1888, the committee, deputed by the society to study and report upon the subject of myxœdema, made its final report. Dr. Ord was the chairman and Dr. Hadden the secretary of this committee.

They report :[1]

1. That myxœdema is a well-defined disease.

2. That the disease affects women much more frequently than men, and that the subjects are, for the most part, of middle age.

3. That clinical and pathological observations respectively indicate, in a decisive way, that the one condition common to all cases, is destructive change of the thyroid gland.

4. That the most common form of destructive change of the thyroid gland consists in the substitution of a delicate fibrous tissue for the proper glandular structure.

5. That interstitial development of fibrous tissue is also observed very frequently in the skin, and with much less frequency in the viscera, the appearances presented by this tissue being suggestive of an irritative or inflammatory process.

6. That pathological observation, while showing cause for the change in the skin during life, for the falling off of the hair and the loss of the teeth, for the increased bulk of the body, as due to the excess of subcutaneous fat, affords no explanation of the affections of speech, movement, sensation, consciousness, and intellect, which form a large part of the symptoms of the disease.

7. That chemical examination of the comparatively few available cases fails to show the general existence of an excess of mucin in the tissue adequately corresponding to the amount recorded in the first observations, but that this discrepancy may be, in part, attributed to the fact that tumefaction of the integuments, although generally characteristic of myxœdema, varies considerably throughout the course of the disease, and often disappears shortly before death.

8. That, in experiments made upon animals, particularly on monkeys, symptoms resembling, in a very close and remarkable way, those of myxœdema have followed complete removal of the thyroid gland, performed under antiseptic precautions, and with, as far as could be ascertained, no injury to the adjacent nerves, or to the trachea.

9. That, in such experimental cases, a large excess of mucin has been found to be present in the skin, fibrous tissues, blood, and salivary glands ; in particular, the parotid gland, normally containing no mucin, has presented that substance in quantities corresponding to what would be ordinarily found in the submaxillary gland.

10. That the full analysis of the results of the removal of the thyroid gland in man demonstrates in an important proportion of the cases the fact of the subsequent development of symptoms exactly corresponding with those of myxœdema.

11. That, in no inconsiderable number of cases, the operation has not been followed by such symptoms, the apparent immunity being in many cases probably due to the presence and subsequent development of accessory thyroid glands, or accidentally incomplete removal, or to insufficiently long observation of the patients after operation.

12. That, whereas injury to the trachea, atrophy of the trachea, injury of the recurrent laryngeal nerves, injury of the cervical sympathetic, and endemic influences have been, by various observers, supposed to be the true causes of experimental or of operative myxœdema (cachexia strumipriva), there is, in the first place, no evidence to show that, of the numerous and various surgical operations performed on the neck and throat, involving organs and tissues, none, save those in which the thyroid gland has been removed, have been followed by the symptoms under consideration ; that in many of the operations on men, and in most, if not all, of the experimental operations made by Professor Horsley on monkeys and other animals, the procedure avoided all injury of surrounding parts, and was perfectly aseptic ; that myxœdema has followed removal of the thyroid gland in persons neither living in, nor having lived in, localities the seat of endemic cretinism ; that, therefore, the positive evidence on this point outweighs vastly the negative, and that it appears strongly proved that myxœdema is frequently produced by the removal as well as by the pathological destruction of the thyroid gland.

13. That, whereas, according to Clause 2, in myxœdema women are much more numerously affected than men, in the operative form of myxœdema no important difference of the same kind is observed.

14. That a general review of symptoms and pathology leads to the belief that the disease described under the name of myxœdema, as observed in adults, is practically

[1] *Med. Press*, May 30, 1888.

the same disease as that named sporadic cretinism, when affecting children; that myxœdema is probably identical with cachexia strumipriva; and that a very close affinity exists between myxœdema and endemic cretinism.

15. That, while these several conditions appear, in the main, to depend on, or to be associated with, destruction or loss of the function of the thyroid gland, the ultimate cause of such destruction or loss is at present not evident.

The Microbes in the Wall.—Esmarch found that by rubbing a small portion of the wall of a dwelling-room with a damp sterilized sponge, he was able to obtain cultivations of bacteria in gelatine, varying in number from 6,391 to 17 colonies to the 25 square centimetres, according to the nature of the wall-covering (paper, paint, varnish, etc.). It appears from his experiments that the higher parts of the walls are less rich in bacteria than within two yards of the floor. As regards the possibility of disinfection, steaming the walls had very little influence in diminishing the number of germs. Spraying with a 1-1000 solution of corrosive sublimate, or a five per cent. solution of carbolic acid was much more effective, but was only perfectly satisfactory when repeated within twenty-four hours. A far simpler and more efficient plan was to rub the walls with soft bread-crumb. By these means all trace of bacteria generally disappeared after a single application, but the crumbs which are laden with germs, must be carefully swept up and burned. The virtue of the foregoing suggestions as bearing on the problem of the disinfection of dwellings remains to be demonstrated, but they are, in any case, very interesting.—*Medical Press*, May 23, 1888.

Hogg (J.) on Specimens of "Maggots" Removed from Cavity of Tooth.—An anonymous correspondent to the *Medical Press*, May 16, 1888, writes as follows: L. F., a domestic servant, æt. 18, generally speaking, in good health, was taken ill with neuralgic pains of the face on April 5, 1888. She had on and off for the past three or four months complained of neuralgic pains and toothache. Some five weeks ago a molar tooth was removed. She had much pain for a week after, and under quinine, etc., with occasional doses of chloral, pot. brom., and gelsemium, got well. On the 5th the pain was over the incisors, and in the evening she got some henbane seeds, which she placed over a hot cinder, allowing the fumes to get into her mouth. Soon afterwards she had six or eight maggots drop "out of her tooth" into a tumbler of water she had ready for the purpose. Her mistress was shown them, and I was told they floated on the surface. I learned subsequently that this inhalation plan was learned from a "gypsy." On the 6th the face was swollen and very painful and as the pulse was weak and the girl inclined to vomit I gave carb. ammon, and, barkin effervescence, milk, acid hydrocyan. dil.; poultices and fomentation of poppies and chamomile flowers. On the 7th the face was very much swollen, especially the upper lip. It was a case of cellulitis of the face. I noticed that both incisors had a black streak up the centre, and as I got the girl to use the fumigation of henbane again, another "worm" was discharged, apparently from this cavity. On the 8th the swelling was less, but pus was apparently forming—an alveolar abscess, in fact. The girl's mother told me that she suffered herself in the same way when a girl. Other members of the family suffered in the same way, and used to adopt a similar method of "smoking out" the maggots. Not having hitherto heard of such a case, nor of such a plan of treatment, I think that it may perhaps be of some interest to the profession; and I take the liberty of sending the maggot I obtained from the patient for identification, as I am not able to classify it myself.

Your correspondent then is, I believe, justified in considering his case as "unique." But he commits himself to the common error of describing the mounted specimen sent for verification as "one of the worms." It is neither a worm nor a maggot, but a veritable embryo of a parasitic entozoa. It belongs undoubtedly to the Trematoda or fluke family, a class of animals known to infest mankind, as well as the lower animals. The ova of the fluke were probably ingested with the infected liver of the sheep or in drinking-water.

Penny (W. J.) Syphilitic Mother; Eight Consecutive Miscarriages; Anti-specific Treatment; Healthy Living Child; Subsequent Miscarriage.—M. M., aged forty, came under my treatment in 1884, for a sore on the knee, which had existed for some months. It had the suspicious appearance of a syphi-

litic sore, and on questioning the patient I found she had had eight consecutive miscarriages. She was then pregnant—rather more than two months gone. She expressed a wish to have a healthy living child, and promised to persevere with the necessary treatment. She was ordered:

Liq. hyd. perchlor. . . .	3 ss.
Sodii iodid.	gr. ij.
Pot. iodid.	gr. ij.
Sp. am. aromat.	℥xx.
Decoct. sarsæ co.	℥ j.

three times a day.

She continued this treatment, with occasional intermissions, when she took an iron and quinine mixture, until her confinement at full term. A fine, healthy child was born, and at the time the mother was in a good state of health. I advised her to bring up the child by hand, but soon after lost sight of her.

Last October she appeared in my out-patient room, with a rash on her face and the old knee trouble, and asked for some more of the same medicine. She rapidly improved under its use. She then told me that the healthy child was still living, and in good condition. About twelve months before, Oct., 1886, she had had another miscarriage, for which she did not express much regret.

This case is of interest, as showing how the transmission of taint and tendency to abort, shown by eight consecutive miscarriages, may be combated by the persistent use of specific medication. It also shows that when the disease has taken firm hold of the system, the course must be continued for a very long period.—*Bristol Med.-Chir. Jour.*, March, 1888.

Westbrook (B. F.) on Pleurisy as a Predisposing Cause of Phthisis Pulmonalis.—The author narrates seven cases, from a study of which he draws the following conclusions:

1. That sero-fibrinous pleurisies, apparently simple in origin and terminating in complete recovery so far as the local manifestations are concerned, may be followed, after a few months, by the development of phthisis pulmonalis.

2. That, in all probability, the pleurisy in these cases acts as a predisposing cause of the tuberculosis.

3. That primary sero-fibrinous pleurisy may result in fibroid phthisis, with the subsequent occurrence of tuberculosis pulmonum.

4. That fluid effusions remaining in the chest a long time may finally so interfere with the nutrition of the lungs or of the body at large as to render it liable to tubercular infection, either local or general.

5. That rational deductions from these things is, that no case of pleurisy should be neglected; that after apparent recovery great care should be taken that the health of the patient is completely restored, before he is lost sight of by the physician. In the words of Sir Andrew Clark: "When we have a patient with basic fibrinous pleurisy, let us hold him fast, restrict his freedom, and treat him carefully until every remnant of it is gone." When all signs of effusion have disappeared, care should be taken that the health of the patient is entirely restored before he is permitted to resume his former occupation, and if that occupation is one which involves any hygienic irregularities, he should be advised to change it. Where there is a previous history of phthisis in the family, still greater pains should be taken. The patient should remain away from business a long time, change his climate and entire mode of living if necessary, and should not be lost sight of by the physician for at least a year, even if his health is apparently entirely restored. When the patient has arrived at middle life, when the costal cartilages begin to lose their elasticity, and the general mobility of the thorax is apt to be somewhat diminished, effusions should not be allowed to remain in the cavity of the chest for more than two or three weeks. If the fluid accumulates after aspiration, this should be frequently repeated, and at moderately short intervals.

If cases are encountered at a late period of the disease, when it is impossible to secure re-expansion of the lung, I believe that the operation of resection of the ribs is worthy of a trial. When the fluid is absorbed, but there are still dulness and feeble respiratory murmur at the base, the patient should be kept for a long time on the use of the most efficient tonics and alteratives, with very liberal diet and plenty of out-door exercise. He should be instructed in the practice of respiratory gymnastics. When the health is sufficiently good, it is well even to inaugurate such exercises as the use of Indian-clubs and dumb-bells. Under judicious exercise of this kind, I have seen a very markedly

contracted side expand till its dimensions were equal those of its fellow, with great improvement in the general condition of the patient. In more delicate subjects, in whom it is frequently advisable to use some passive means for expanding the chest, the inhalation of compressed air, or the equivalent treatment by the pneumatic cabinet, will sometimes give brilliant results.—*N. Y. Med. Jour.*, June 9, 1888.

SURGERY.

A Singular Accident.—Dr. F. T. Wheeler, of Roscoe, N. Y., records a case of a rather peculiar injury, which is as follows:

W. S. Y., while cutting cord-wood, felled a tree, which he expected to go uphill, as it leaned that way, but just as it was about clear from the stump, the wind caught it and carried it down the hill. Y. saw it coming towards him, and he tried to spring out of the way, but his right foot caught in a branch or root under the snow, which was about sixteen inches deep. As it was one leg or both, he raised up his left leg, and the body of the tree, as it came back over the stump—having lodged against another tree—caught his right leg between the end of the body of the tree and the ground with the root or branch, where he stood on one foot, and tore his foot completely off at the junction of the os calcis and astragalus with the cuboid and scaphoid. The integument, however, was severed near the astragalo-tibial articulation, leaving the os calcis and astragalus attached to the stump. The foot, which was twelve feet from him when he tried to rise up, presented a singular appearance with the tendons and muscles hanging to it, as the extensor longus digitorum, flexor longus digitorum, peronæus longus, peronæus brevis, and extensor proprius pollicis were torn from their upper attachments.

It was decided to amputate at the junction of the upper and middle thirds, which was done by the ordinary flap operation, the patient making a good recovery and having a good stump.

I find it is a rare thing to have a limb torn completely off, even in railroad accidents.

Some time since, a physician near here had a thumb to look after and dress, or rather the stump, as the thumb was torn off and one muscle pulled out from its upper attachment; he also made a good recovery, the wound being merely wrapped up in cloth and gauze, which, with iodoform, was the only dressing used for the amputated leg.—*Med. Register*, May 18, 1888.

Chavanis and Waton on Alarming Syncope Following Aspiration of a Hydatid Cyst of the Liver.—The patient was a boy of sixteen, and aspiration had twice been practised upon the cyst with no untoward results. Before tapping, the pulse was found normal; there was a soft systolic murmur at the apex of the heart, transmitted slightly toward the axilla. Antiseptic precautions were employed, and the puncture was made in the median line, just below the ensiform cartilage. Considerable tissue was traversed before the cyst was reached, when about half a pint of fluid was evacuated, that coming first being clear, while toward the last it became reddish and frothy. On withdrawing the trocar, the face of the patient became crimson, and immediately after extremely pale. Greenish vomiting occurred twice, and then the patient fainted. The pulse failed, the lips became bluish, and tracheal râles were heard. Dyspnœa was intense. Auscultation showed the heart to be acting feebly, with a systolic and presystolic murmur at the apex, accompanied by an intense muscular bruit. An epigastric distension and pulsation suggested an over-distended right heart.

Alarming symptoms lasted three quarters of an hour.

Applications of ice to the hepatic region, and sinapisms to the præcordium gave relief in ten minutes.—*La Loire Méd.*, May 15, 1888.

Squires (G. W.) on the Evacuation of Mammary Abscesses through their Natural Outlets.—The author discovers the closed duct by applying the breast-pump to the nipple of the affected side when the orifice of the duct will pout out, appear swollen, and closed up. He has succeeded in dilating the duct with a small silver probe, and then, by applying the breast-pump, has, with a lens, seen pus flow freely. A still better way is to use a capillary catheter with glass receiver and hand-bulb exhauster, such as invented by J. W. Cousins, of London. By this delicate operation, the use of the bistoury may sometimes be avoided.—*Med. Record*, June 2, 1888.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital.

VOL. V., No. 26. June 28, 1888. WHOLE No. 74.

CONTENTS.

	PAGE
Occasional Report on Surgery	305
Occasional Report on Toxicology	310
Miscellaneous	315

OCCASIONAL REPORT ON SURGERY.

Lannelongue on Ectocardia and its Cure by Plastic Operation.—The patient was a female child, six days old when brought to the author, February 15, 1888. It was rather puny in appearance, but it nursed well and all its functions were well performed.

All parts of the body seemed well formed except the chest; here, in front, at about the middle of the sternum, was an ulceration two centimetres in diameter, surrounded by an elevated reddish margin of skin. In the centre of the base of this ulcer was a yellowish membrane, which seemed on the point of necrosing, and through which the cardiac impulse could be seen and felt.

On close examination of the chest it was seen that each clavicle terminates with the first rib in a head by an articulation which is entirely free inwards and upwards. The median segment of the sternum was wanting, but the lower segment, with the xiphoid appendix, was normal. During inspiration the interclavicular region and the ulcerated area were drawn in; during expiration both bulged. Careful inquiry failed to disclose any hereditary or other explanation for this deformity. On February 17th, the yellow membrane at the base of the ulcer sloughed, bringing the ventricular wall into plain view. At times the apex of the heart protruded from the chest wall. The surface of the ventricles appeared a dark red, and from the anterior surface near the apex protruded a small fungoid prominence. No trace of pericardium could be seen.

In the few succeeding days the depression took on an exuberating granulation process which invaded also the ventricular surface of the heart. Fearing that the heart would be included in the resulting cicatrix, the author determined upon an immediate plastic operation, which was performed on February 24th.

Two vertical incisions were made on either side of the ulceration and about 1.5 centimetres distant from its edge. The two strips thus marked off were loosened sufficiently to be brought together in the median line, where they were fastened by three sutures. Only a few drops of blood were lost, no shock was experienced, and cicatrization was complete in twenty days.

Two months after the operation the condition of the child was entirely satisfactory. The cardiac pulsations were plainly visible, but the heart was evidently encased in a space where it was freely movable, no adhesions having been contracted during cicatrization.

By this operation a case of ectocardia was changed into a case of subcutaneous ectopia, and the author hopes, as the heart and child develop, that the heart will eventually become entirely and permanently intrathoracic.—*L'Union Méd.*, May 12, 1888.

Gross (S. W.) on a Clinical Study of Carcinoma of the Breast and its Treatment.—In the *American Jour. of Med. Sci.* for April, 1888, the author concludes a series of papers on the above subject, by narrating in detail his mode of operating upon cancerous breasts. For nine years he has amputated the entire breast with its coverings, and invariably cleared out the axilla. In the old operation, the

nipple and a portion of the skin are included in two oval incisions, the flaps are raised, the mamma is then rapidly dissected or torn from the pectoral fascia, the vessels are secured, a drainage-tube is inserted, and the edges of the wound are united with sutures. The surgeon congratulates himself upon having done a neat bit of work, and the patient is pleased with the rapidity of her recovery. But beneath the flaps so neatly apposed are hidden the germs of recurrence in the fat and pectoral fascia that remain behind, and in the lobules, which operators often overlook.

The entire mammary region having been carefully palpated, while the patient is supine, in order to discover any outlying lobules should they exist, a line is drawn with an aniline pencil around the entire circumference of the breast as a guide for the knife. If the tumor be peripheral, the incision must extend for at least one inch beyond its apparent limit. A stout large knife is then carried along the line down to the pectoral muscle, spirting vessels are temporarily controlled with the fingers of the assistant, or with clips, or forcipressure forceps, and the breast is removed along with the pectoral fascia, through which the muscle is exposed as if for class-room demonstration. The vessels having been permanently secured with catgut ligatures, the fat around the line of the incision is carefully explored for any outlying nodules of disease, a precaution, the observance of which will be made apparent when I state that in three of my cases they were found, thereby showing to what extent the disease may disseminate itself even in apparently simple cases. Any remaining nodules having been removed, the pectoral muscle is now carefully examined with the eye and fingers for nodules. If present they should be freely removed, and the wound seared with Paquelin's cautery. The large exposed surface having been protected with an asepticized towel, the arm is carried outward and upward to rather more than a right angle with the trunk, and an incision is prolonged into the axilla about three quarters of an inch below the lower border of the great pectoral muscle, through which the deep fascia is opened to the same extent as the cutaneous wound. If there happen to be a number of small glands or two or three large ones, and they are not united to the surrounding tissues, their removal, along with the entire fatty contents of the axilla, can easily be effected with the fingers and scissors. When, however, as more frequently happens, the glands and other axillary contents are converted into an inseparable mass, they will have to be dissected out with the knife and scissors curved on the flat. In performing this step of the operation, the lower portion of the mass and that which adheres to the side of the chest, and pectoralis minor, and surrounds the intercosto-humeral nerve and other superficial nerves should first be separated, and we should carefully work our way up to the apex of the space, including every vessel, arterial or venous, between the two ligatures before dividing it. Unless this precaution be observed, large venous trunks are liable to be cut or lacerated close to their points of entrance into the axillary vein, an accident which will be followed by troublesome hemorrhage. The most difficult part of the operation is the separation of the glands from the axillary vein, as it lies under the pectoral muscle. In many cases this can be effected with the finger-nails, the arm having been brought toward the trunk; but when they are firmly incorporated with the vein, provided the adhesion exists to a limited extent, the corresponding portion of the vessel should be removed between two ligatures. Glands which are attached to the vein immediately beneath the clavicle are best reached by carrying an incision in the interval between the sternal and clavicular origins of the pectoralis major muscle, as in the operation for ligation of the first portion of the axillary artery. Such a procedure will do away with the necessity for division of the pectoralis muscle, which is recommended by Verneuil.[1] When the glandular involvement is very extensive, to afford more room, Esmarch[2] favors amputation at the shoulder-joint, but such an extreme measure is, in my opinion, useless, as it will be found that all diseased tissues cannot be removed. Finally, the mass is brought down and the dissection continued until it is separated from the posterior boundary of the axilla, great caution being exercised lest the subscapular artery, vein, and nerves be injured, thereby avoiding hemorrhage and impairment of the movements of the arm. Should the axillary vein be wounded, if the injury be

[1] *Gazette des Hôpitaux*, 1879, p. 955.

[2] *Deutsche med. Wochenschrift*, No. 17, 1883, p. 258.

slight, hemorrhage may be prevented by including the opening in the grasp of forci-pressure forceps, which, as I know from experience, need not be retained longer than two days; should the injury, however, be extensive, a ligature should be cast around the vessel on each side of the opening.

The parts are now thoroughly irrigated with the 1 to 1,000 solution of corrosive sublimate, and the edges of the wounds are brought as thoroughly as possible into apposition. If the breast flaps be raised from the subjacent parts for an inch and a half or two inches, one will be astonished to find how nearly the wound may be closed in corpulent women with large breasts, in whom before approximation the exposed surface was as large as a dessert plate, and how accurately the wound can be united in thin women with small breasts. In the former class of patients, I first insert two or three of Macewen's button sutures at the bases of the flaps, and then approximate the free edges with the continued suture. In this way the edges of the largest wounds may be brought so nearly together that a space not exceeding two fingers' breadths in width will have to unite by the process of granulation. A hole having been punched through the most dependent portion of the posterior axillary flap, into which a glass drainage tube is inserted, the edges of the axillary wound are coaptated by the continued suture, the material for the suture being heavy sublimate silk. When it is possible to bring together the edges of the wound, a drainage tube is employed; otherwise. it is not required. Before applying the outer dressings, a description of which is unnecessary, both wounds are again thoroughly washed out with the corrosive solution. The drainage tube is removed at the end of twenty-four hours, and the stitches are taken away on the eighth day. If the wound has been a partially open one moist antiseptic gauze is continued until it has fully cicatrized, which requires from four to six weeks.

When, as usually happens, it is possible to bring the edges of the wound in apposition, it is closed with the continuous chromicized catgut suture, and painted over with iodoform collodion. At the expiration of eight or nine days, when the crust will have become detached, the union will be found to be perfect.

The mortality of my operation, which is more extensive than that of Banks, and of which nearly one third were not aseptic, is only 3.7 per cent., although in addition to the removal of the entire breast with its coverings and evacuating the contents of the axilla, large portions of the pectoral muscle were excised in 1 case out of every 7. It has already been pointed out that of 313 amputations of the breast as ordinarily practised, combined with extirpation of the glands, the recurrent growth was seated in or near the cicatrix in 235, in the glands in 38, and in both situations in 40; in other words, recurrence was met with in the remains of the breast tissues in 275, or 87.86 per cent. Included in these figures are my own cases. If these be deducted, amputation of the breast as usually done, with clearing out the axilla, demonstrates that in 94.47 per cent. the disease recurred in or near the cicatrix, while my cases show only 30.55 per cent. of recurrences in that locality, the percentage in favor of immunity from local reproduction being in favor of my procedure by 63.92 per cent. In addition to these advantages, I have obtained 21.05 per cent. of cures.[1]

I have in four recent cases so modified my operation, the skin in none being apparently affected, as to save a sufficient amount of that structure to admit of bringing the wound nicely together without tension.

When the contents of the axilla form a large, hard, nodular tumor, and the disease has existed for some time, before amputating the mamma, I make it a rule to attack the axilla first, since in many of these cases it will be impossible to remove the entire disease even if the surgeon were to excise the vessels and the axillary plexus of nerves to which the mass adheres. If all diseased tissues cannot be extirpated, nothing further is done. In such cases removal of the breasts prior to attempts to extirpate the axillary mass involves an unnecessary ope-

[1] Of my 43 operations, 2 were fatal; 5 patients were lost sight of after recovery; the disease recurred in 16; and 20 subjects remain well or perished from other affections without recurrence. Of this last class 8 were cured; so that of 38 cases in which the history could be traced, 8, or 21.01 per cent., were examples of permanent recovery. Of these, 1 lived for 7 years and 10 months, while the remainder are still doing well, 1 for 8 years and 7 months, 1 for 8 years and 6 months, 2 for 6 years and 3 months, 1 for 3 years and 9 months, 1 for 3 years and 5 months, and 1 for 3 years and 1 month after operation.

ration. Should the supraclavicular glands be invaded, I always cut down upon them first and remove them, if they be superficial. Should they be deep and surround the large vessels and nerves, attempts at their removal would be not only dangerous, but useless.

In atrophying schirrhus of several years' duration; in any variety of carcinoma in which the attachments involve the entire mammary region; when nodules are extensively disseminated over the surface of the chest; in the cuirass form of carcinôma; when immobility of the arm, œdema, and pain indicate that the vessels and nerves of the axilla are intimately connected with the mass; and when there are indications of visceral implication, the disease has advanced so far that radical operations are unjustifiable. Implication of both breasts is not a contra-indication.

In cases unfit for operation, life must be rendered endurable by the relief of pain, the arrest of hemorrhage, and the correction of fetor. If the suffering be great, it may be allayed by the hypodermic injection of morphia and atropia, repeated as often as it may be required. When the pain is increased by the rapid growth of the neoplasm, during which the breast is hot, tense, and tender, nothing mitigates it so rapidly as the local application of a strong solution of acetate of lead, or of bags of ice. When the active symptoms have subsided, these measures may give way to the application of an ointment composed of a drachm each of extract of belladonna and extract of stramonium to the ounce of lanolin. Œdema of the arm should be met by massage, elevation, and a flannel roller. Hemorrhage may be controlled by styptic cotton, although excision of the breast may be required if it recurs and threatens life. As a deodorizer, I have found that a one-per-cent solution of chloral hydrate, or a three-per-cent. solution of citric acid, both of which remedies also possess the merit of assuaging pain, answer a better purpose than the germicidal antiseptics. Should the tumor be sloughing, it should be freely sprinkled with iodoform, and dressed with sublimate gauze.

With regard to general measures, it need only be stated that the diet should be nutritious and assimilable, and that the strength should be supported by alcohol and appropriate tonics.

Keen (W. W.) on a Lesson in Septic Surgery.—A hemlock splinter pierced the shoe and punctured the left great toe of a healthy man of twenty-six. Only twelve hours after the injury was received pain existed in the left leg, presumably from early invasion by the lymphatics; within thirty-six hours after the injury, the left shoulder joint was involved, the temperature rose to 104.5°, and was followed speedily by a chill, the involvement of other joints, and after a comparatively long illness, by death. Infectious endocarditis of the right ride, a typical lesion, was found on autopsy. Associated with this were infarcts in the brain, heart, lungs, spleen, kidneys, and intestines.

This case may teach us two most important lessons: 1st. The danger of delay even in slight wounds. Three hours elapsed between the receipt of the injury and any surgical attention, and that of the most superficial character. Within that time doubtless the mischief began. The local trouble, however, was at no time serious in external appearance. When I first examined the foot on the 15th day and found the joint entirely destroyed, with the exception of a small, almost uninflamed opening caused by the splinter, and a drop or two of pus, the toe looked perfectly normal. Yet even in so casual and apparently unimportant a wound, with so little local trouble, the infective process ran an extraordinarily rapid course, in spite of immediate amputation; 2. It teaches us the absolute importance of careful, thorough, and antiseptic surgery. The proper course to pursue would have been to etherize the patient (or cocaine might have been used), and to make a free incision at the site of the wound, so as to be sure that the entire splinter was removed immediately; and as the wound was so near a superficial joint, to determine the fact whether this joint was involved or not.

Next, and equally important, the wound should have been most carefully disinfected, and an antiseptic dressing applied. Had the patient sought surgical advice at once, and had thorough surgery and careful antisepsis been used, it is probable that he would have recovered without any serious trouble.

That he was personally a blonde, with a suppurative tendency; that his father had suffered for eighteen months with suppura-

tion following an injury near the knee from a tack, and that his sister had suffered for six weeks from a palmar abscess, make it possible that suppuration, and even death, might have occurred in spite of the utmost precaution. But the existence of this tendency, personally and in the family, would be the very strongest possible reason for *extra* precautions to prevent any septic trouble.

Until surgery becomes an exact science, we cannot say that a different result would *certainly* have followed had antiseptic methods been used; but we *can* say that without them he was certainly doomed to trouble, and, even as the result showed, to death; and that with them his chances would at least have been extremely good.

Dr. Dock made some cultures from the heart and spleen, and found only the streptococcus pyogenes, no staphylococcus. Hence probably the multiple thrombi without the septic metastatic abscesses.—*Med. and Surg. Reporter*, April 28, 1888.

French (P.) on an Analysis of One Hundred Consecutive Amputations.—In the *St. Louis Courier of Medicine* for June, 1888, the author draws a comparison between the results of his operations and those of other surgeons as shown by published statistics, which comparison is decidedly more favorable to the former.

Of his one hundred consecutive cases in which amputation was performed, eleven died; of these two were amputations through upper third of the leg, two through the middle of the thigh, one through the upper third of the thigh and the shoulder joint, one both thighs, middle third, one both legs, middle third, one knee joint and lower third of leg, and one at the shoulder joint.

His dressings were exceedingly simple, consisting of borated cotton, clean muslin cloths with strict observance of cleanliness, secured by perfect drainage and repeating the dressings sufficiently often. No antiseptics were used. In most cases reported the operation was performed on account of lacerations and compound and other injuries.

Clarke (B.) on the Value of Antiseptic Precautions in Internal Urethrotomy.—The dangers of the operation itself are, the author maintained, dependent on septic fever; and it depended either on self-infection from a septic urethra or on dirty instruments. The latter source of infection could be easily guarded against by the thorough cleansing of instruments and catheters, whilst the purification of the urethra was no easy matter. To effect this, however, as far as possible, the urethra should be irrigated with sublimate 1 in 2,000 for several days beforehand, and when the stricture has been divided, the bladder should be washed out with a similar solution, and then with hot water at a temperature of 105° F. After this a catheter should be tied in for twenty-four hours. By this means the urine came very little in contact with the urethra, and septic infection was avoided. Fifteen cases were related in which the plan had been tried by the author, and he alluded to some others in which he had suggested the plan to other surgeons. The results were very successful.—*Br. Med. Jour.*, June 2, 1888.

[The editor would consider the above-named solution too strong by far for an ordinarily sensitive urethra, and would suggest that a $\frac{1}{10,000}$ solution is germicidal and irritating enough.]

Bond (C. J.) on Failure to Find the Colon in Lumbar Colotomy.—I think there is one circumstance which has a very important bearing on this condition, and that is the amount of distension of the bowel, not only of the large intestine itself, but of the whole peritoneal cavity. In the great majority of bodies examined in the post-mortem room, where the intestines are collapsed, and especially in multiparous women, the descending colon is found completely invested by peritoneum, with frequently a mesentery of half an inch or more in length. Now, the effect of gradual distension of the gut by the injection of air is (as can easily be proved by experiment) to cause the bowel as it distends to encroach on this mesentery, shortening and separating its two surfaces, the bowel at the same time coming into close contact with the abdominal wall, and this occurs all the more readily if the parietal reflections of the mesentery are themselves stretched apart by the general distension of the peritoneal cavity. For the peritoneal investment of the hollow abdominal viscera accommodates itself to their varying size more by a sliding or folding movement than by an actual stretching of the membrane itself.

With regard to the practical application of these remarks, in the operations I have

witnessed no difficulty has occurred in finding the bowel in cases where there has been distension, whereas when the bowels have been empty difficulty has occurred, and in the last case on which I operated a mesocolon of two inches in length was found only after opening the peritoneal cavity. In such cases, then, if the gut cannot be distended with air at the time of the operation (a somewhat uncertain proceeding) it would be better, as Mr. Allingham suggests, to open the peritoneal cavity and draw out the bowel.—*Br. Med. Jour.*, May 19, 1888.

Woolcombe (W. L.) on a Case of Successful Transfusion; Remarks.—A man of fifty-five was admitted on Jan. 16, 1888, having fainted from loss of blood, the result of two jagged wounds, one on either side of the neck, on the level of the most prominent part of the thyroid cartilage; that on the right side being about four inches long, and exposing the carotid sheath; that on the left being superficial in the greater part of its extent, but penetrating deeply in the centre.

After careful examination, no bleeding point could be found; the wounds were therefore sutured with catgut and drained. A strong beef-tea enema was administered with one ounce of brandy. At 2 A.M., six hours after admission, violent hemorrhage took place from the wound on the left side. The wound having been reopened, a pair of Spencer Wells' pressure forceps were placed on the bleeding point—a nick in one of the deep thyroid veins. The patient was now in a state of profound collapse. Complexion ashy-gray; pupils dilated and fixed; conjunctivæ insensible; pulse not perceptible; breathing shallow and gasping, and jactitation present; in fact, the man was on the point of death. The necessary apparatus being at hand, ten ounces of saline solution (phosphate of soda, twenty grains to the ounce) were quickly injected into the right median cephalic vein. The patient's condition improved immediately, his pulse becoming again perceptible, though small and somewhat thready; his breathing also became deeper and more regular, and his complexion much improved. After tying the bleeding vein in two places and dividing between, the wound was resutured. From this time the man improved steadily, with the exception of slight suppuration in the wound, which was reopened. In less than three weeks he was able to appear before the magistrates, and, after one day's imprisonment, to resume his occupation as a gardener.

The apparatus used here was simply a glass syringe, connected with a glass nozzle by a short rubber tube.—*Lancet*, May 19, 1888.

OCCASIONAL REPORT ON TOXICOLOGY.

Westcott (C. D.) on a Case of Poisoning by one Grain of Atropia Sulphate.—An adult insane male swallowed the contents of a bottle of eye-lotion containing one grain of atropia sulphate.

At 4.30, two hours afterwards, he was reported as being in a "sort of a fit," and when seen seemed as if emerging from an epileptic seizure. His pupils were widely dilated, his muscles relaxed, and he was in a condition of stupor.

At my evening round at seven o'clock, when I called for the eye-lotion, and the empty bottle was brought to me, my attention was called to A. He was lying on the floor, apparently unconscious. When shaken vigorously, he aroused and seemed to realize his surroundings, but could say nothing, though making visible effort. His pupils were largely dilated, with mouth and tongue very dry; extremities cold; legs so much paralyzed that he could not stand; face pallid; pulse 120, respiration 12, shallow and irregular. So much time had elapsed since the drug was taken that evacuation of the stomach was deemed useless.

I at once administered one half grain of sulphate of morphia hypodermatically, and had the patient put in bed and surrounded with blankets, hot water-cans, and brisk friction applied to the legs and trunk. The catheter was passed, and nearly three pints of very light-colored clear urine drawn. At nine o'clock the pulse had increased in volume and strength, and the surface was warm. The patient made some inarticulate sounds, but his voice was very husky. If not almost constantly shaken he would drop off into a deep sleep, and respiration would become alarmingly slow—10 or 12 to the minute.

The following prescription was given:

℞ Tr. digitalis . . . . . m. xv.
Potassæ nit. . . . . gr. x.
Spirits frumenti . . . . . ʒ ii.
M. S.—At once.

At 9.30 paralysis had almost entirely disappeared, and he was walked between two attendants until 11 P.M., but the tendency to sleep was so great that occasional flagellations were necessary to keep him awake, even while walking. The pulse was 150; temperature 101° F.; respiration 20 and regular. The tongue had become moist, and the patient would reply to questions in monosyllables, and swear at the attendants when they slapped him unusually hard. He complained of some headache. Digitalis, nitre, and whisky were repeated, and the catheter passed, but only a small quantity of dark-colored urine was obtained. The patient was then put in bed, and kept awake by occasional flagellations until 1 A.M., when he was entrusted to the care of two attendants, with instructions to keep him moving and give him two drachms of whisky every hour. They reported having walked him until 4 A.M., when they allowed him to rest, and with an occasional shake kept him awake. At the rising hour, 5 A.M., he dressed himself and went to breakfast with the others of his ward. At 6 o'clock his pupils were largely dilated, but he looked and acted as well as usual, said he had no headache and felt well. As the urine had not been passed voluntarily, the catheter was resorted to, and twelve ounces of very dark-colored urine were drawn. The pupils remained dilated for some days, but otherwise nothing unusual was observed in the patient physically; mentally, he seemed brighter and more cheerful for some weeks.

There was no delirium observed at any time, and only occasional muscular twitchings during the early part of the night.—*Chicago Med. Jour. and Examiner*, March, 1888.

Pedigo (L. G.) on a Case of Atropia Poisoning Successfully Treated with Amyl Nitrite, with Remarks on Treatment.—The patient, a man aged about 40 years, had called at his physician's office for a hypodermic injection of cocaine. By some one's mistake, one grain of sulphate of atropia had been dissolved, instead of the same quantity of muriate of cocaine. One half of this solution (a half grain of sulphate of atropia) was injected beneath the skin at one dose.

The patient proceeded on his way home (a distance of about three hundred yards), and complained of a peculiar feeling of discomfort on the way; but on reaching home he so far recovered in a few minutes that he entered his study and began the examination of a set of law papers. He soon found that his powers were rapidly failing. His call of alarm was answered by a servant, who found him in an utterly helpless condition and carried him to his bed. The patient passed into a state of profound stupor and unconsciousness, with all the usual symptoms of belladonna poisoning. Several physicians were called in, the diagnosis was promptly made, and the treatment was begun about 12 M.

The remedies used were alcohol, strychnia, and morphia (all hypodermatically), and galvanization of the sympathetic. The aggregate amount of morphia given in the case was 1¼ grs.; of strychnia, 1-25th gr. The exact amount of alcohol was not recorded.

At 2:30 o'clock, when the writer's observation of the case began, the patient was sinking rapidly. The respiration was kept up by artificial means; the pulse was steadily become feebler, and the appearance of the temporal vessels and face indicated decided cerebral anæmia. At this time a hasty consultation was held, and the use of nitrite of amyl was suggested and agreed to. The drug was secured promptly, and was administered by inhalation. Artificial breathing had become the only means of sustaining the function of respiration; so that the first dose of the amyl was literally pumped into the lungs. The beneficial effect was unmistakable. A finger on the pulse discovered immediate improvement in the action of the heart; the lungs began to draw in air by natural method—still needing a little artificial encouragement, however, but much less, and much less constantly than before. The use of the drug was regulated solely by its effects on the three great vital organs—the heart, lungs and brain. No definite dose was given, but as much as a half drachm was poured on a handkerchief and held to the nostrils at different times during the progress of the case. The temporal vessels were closely watched for the indication to withhold the remedy.

It is a noteworthy fact that several minutes elapsed after the striking effects on the action of the heart and lungs before the cerebral circulation manifested any change. The drug was used in varying doses and with intermissions of varying lengths for more than an hour

About 4 o'clock the patient began to improve in all respects. The capillary circulation was perceptibly better, and the muscular system began to respond at times to the strong galvanic current which had been used for nearly four hours. Soon the nitrite of amyl and the battery were no longer needed, and it was obvious that the crisis was past. The patient began to struggle, making repeated efforts to sit up. When from the heart's action it was thought to be safe, the sitting posture was allowed.

Then followed a stage of exalted reflex excitability. The man was busy, muttering indistinctly and incoherently upon various subjects, and handling unreal objects. When a train was heard to signal its approach to town, he assumed the air and attitude of listening, drew a phantom watch from an imaginary pocket, looked at it with a pair of blinded eyes, seemed entirely satisfied, and passed quickly to another subject.

Bromide of potassium was administered in two doses of thirty grains each, with the happiest effect in controlling reflex symptoms. The patient became comparatively quiet after the first dose, and was entirely relieved of "nervousness" by the second. At seven P.M. he was surprisingly comfortable. The usual cystic troubles were very slight and soon passed away. The patient slept well that night, and was on the street in about two days.

If I had another similar case to treat, I would use morphia in the first stage, strychnia and nitrite of amyl in the second, alcohol in the first and second, and bromide of potassium in the third.—*Virg. Med. Mo.*, May, 1888.

Ward (C. M.) on a Case of Poisoning by the Fluid Extract of Belladonna.—An unknown amount of the drug was swallowed by a girl of twenty. The symptoms were staggering and an inability to stand (drunkenness), dilated pupils, hurried respiration (40–60), feeble and quick pulse, and excessive volubility. Her busy delirium was typical, at times laughing and crying. Urine was voided involuntarily. The treatment consisted of emesis secured by mustard and $\frac{1}{6}$–$\frac{1}{8}$ gr. doses of morphia at rather infrequent intervals; at 12.45, 2.30, 5, 11 A.M., and 11 P.M.—*N. Y. Med. Jour.*, May 7, 1888.

Johnson (A. J.) on Poisoning by Hyoscyamin.—For some gastric ailment, a man was given a powder containing hyoscyamin gr. $\frac{1}{12}$. He took the powder and sat down to tea; almost at once he felt unable to hold up his head, and felt as though it would drop in the plate before him. This feeling seemed to pass up and out of the top of the head and away, only to return with increased force in a few seconds. On rising, he felt very light, and staggered about in seeking the lounge to lie down. On rising from the lounge, he fell. Creeping sensations started at tips of fingers and toes, went all over the body, and passed out of the head. Mustard and water did not produce emesis; salt and warm water later did vomit.

At this stage vision failed, objects in the room were all running together. There was a terrible strained feeling at the back of the eyes, which seemed to be pushing out of the head. The head seemed to get correspondingly large, and seemed to have a rim around it. His throat felt small, and tongue enormously large, and at times speech was very indistinct. All these symptoms were described by the patient as occurring in the first fifteen minutes after swallowing the powder. A physician then arrived, and gave sulphate of zinc and warm water. Very soon after this, the patient lay down, and remembered nothing more for thirty-six hours.

When seen twenty-four hours after the ingestion of the drug, he was lying in a semi-comatose condition, complaining in an incoherent way of thirst, and getting very excited when aroused. The pupils were widely dilated; there was much confusion of thought, and the pulse was small and thready.—*Canad. Pract.*, Jan., 1888.

Connors (W. F.) on Stramonium Poisoning.—On the evening of October 17th I was requested to see a mother and her six-year-old son, who were acting in a strange manner. Two hours before they had both partaken of some sage tea (as the mother supposed) for a cold. The husband and father said he went down town in the evening, leaving his wife sitting by the stove sewing and his son playing on the floor, and when he returned, after an absence of two hours, he discovered both wife and child staggering around the room, unable to sit or stand. Taking hold of his wife, whose mind was clear, he learned that she had taken, as she said, some sage tea, which at first made her head ache, and then she got so dizzy that she could do nothing but turn round. It seemed to her

that she was trying to stand while the room seemed to spin around at a rapid rate.

Spreading a large quilt on the floor, he placed wife and child on it, and there they were when I arrived. They were apparently trying to walk around each other on their hands and knees, the head of each being forcibly inclined to the right, with a disposition to *manége* if left alone.

I left them on the floor while I instituted a search for the sage, and found a one-ounce package of stramonium herb, plainly marked, with three drachms missing, which I afterwards learned was the amount the mother had used in a cup and a half of water, which was allowed to steep about ten or fifteen minutes before she strained it through a cloth, and, after adding some sugar, she gave the boy half a teacupful, drinking a full teacup of the decoction herself—*i. e.*, she had then taken the tea made from two drachms of the dried herb, while the boy had taken that of one drachm. Having now learned what the nature of the poison was, I examined the patients more closely. The pupils were dilated to the fullest extent; the eyeballs were suffused and devoid of expression; conjunctiva congested; the face flushed; the head oscillating from side to side when the patient was held, with a disposition to turn the head forcibly to the right; the mother muttering incoherently, in which the names of Georgie (her boy), sage, and George (her husband's name) were heard, while the boy would, at intervals of a few moments, utter a low, whimpering scream. I at once injected half a grain of morphine into the mother's arm, and a quarter of a grain into that of the son, and repeated it every half hour until four doses had been taken, supplementing the same with whiskey and strong coffee without milk or sugar. Previous to giving the morphine, I gave the mother a large dose of pulverized ipecac, followed by what tepid water she could be induced to take, without causing emesis. The boy fought us so that we could not give him any. After the second injection the vertigo was much less, and now a new train of symptoms set in in the mother and son. The former, who usually spent much time sewing, held her thumb and forefinger of the left hand up to a level with the eye, and with the right pointed to it, as one threading a needle; then, after a while, she grasped her dress with her left hand, and with the right went through the motions of sewing, stopping frequently to thread the needle as before. The son now would let no one touch him, and, if allowed to lie on the quilt, would remain quite still, while any effort to move or place the clothing over him excited resistance. The pulse at first in the mother ranged between 90 and 100, and was thready; in the boy, between 120 and 130, and lacked volume, which began to return on the administration of the morphine and whiskey. After the fourth dose of morphine had been given, they both dropped into a quiet sleep, which lasted several hours. During all the time the mother would answer intelligently when spoken to, but would at once relapse into her confused state. I left them at 2.30 A.M., returning at 8 A.M., to find the mother suffering from an intense occipital pain, which lasted several days. The boy, who had several copious passages during my absence, was feeling quite well, though the pupils were still unusually dilated, and his face flushed. The mother was troubled with obstinate constipation, which required the free use of cathartics to overcome.—*N. Y. Med. Jour.*, Feb. 25, 1888.

Thorpe (G.) on a Case of Poisoning by the Ingestion of Himrod's Powder.—I was called to A. W——, aged 27, who suffers from chronic bronchitis and asthma, and had been recommended to use Himrod's inhalation for their relief, which I believe is mainly composed of stramonium, lobelia, and other antispasmodics. Without reading the directions, he had mixed himself a teaspoonful of it with water and drunk it. On arrival, about an hour afterwards, I found the patient staggering about the room as though intoxicated, frequently muttering, in a state of wild delirium, incoherent in his speech, and totally unconscious of his surroundings. The pupils were widely dilated, cold beads of perspiration stood upon his forehead, and his pulse was very slow and feeble, about twenty-five beats a minute. Altogether his condition was an alarming one. I at once administered an emetic of warm mustard-and-water, and subsequently one of sulphate of zinc, both acting well and bringing up part of the poison. I then ordered cold affusions to the head, and gave him some brandy-and-water, as the pulse was still getting slower. After a time he rallied slightly, and I left, giving directions for him to drink copious draughts of lime-water. I saw him again in the evening,

when he was certainly improved, but still delirious. However, on seeing him the next morning he did not seem very much the worse for what had happened.—*Lancet*, May 19, 1888.

Haigh (T. D.) on a Case of Profound Opium-Poisoning Cured with Amyl Nitrite.—The patient, a woman, was said to have taken two and a half ounces of laudanum.

She was lying on a bed totally unconscious; face and hands of a livid purple; pulse extremely feeble, rapid, flickering, intermitting; pupils dilated, but ragged in outline, like the pupils of a dead person; respiration did not exceed 4 per minute.

A hypodermic of atropin had been given at the doctor's first visit, but with no visible effect.

The first pearl of amyl nitrite was broken and imperfectly administered. The second was more carefully prepared, and the effect was most wonderful, calling forth expressions of surprise from those looking on. The face and hands quickly resumed their natural hue. The respiration gradually but rapidly became natural, and the pulse became more steady, though still rapid and weak. Speaking to her, she opened her eyes, aroused thoroughly to her surroundings, and requested (not very politely) to be left alone. From this time on nothing more was required.—*North Carolina Med. Jour.*, Feb., 1888.

Morse (G. M.) on Attempted Suicide with 51 Grains of Morphine.[1]—A man, of 32, swallowed twelve ounces of water containing 51 grains of morphine. At an unknown interval after ingestion of the drug he vomited about two ounces of the contents of the stomach, leaving more than 40 grains of morphine in his stomach for more than twelve hours. When seen at this time he was in a state of profound opium narcosis, and could not be made to swallow.

Atropine, $\frac{1}{50}$ gr., was given hypodermically, the stomach was evacuated and washed out with the stomach-pump, and a pint of strong coffee pumped in. Flagellations and galvanism were resorted to, and later 10 grains of caffeine were given, which dose was repeated every two to three hours. Complete recovery supervened.—*Boston Med. and Surg. Jour.*, June 23, 1887.

[1] See MEDICAL ANALECTIC, 1887, p. 276, for a case where recovery followed the ingestion of 36 grains of morphia.

Pander (H.) on the Physiological Action of Chromium.—The compound which he found to answer best was the double lactate of chromium and sodium. The acute forms of poisoning show themselves by the disturbance of the respiration and of the central nervous system; chronic forms affect the skin and also the mucous membranes when air containing finely divided chromic oxide is allowed to come into contact with them. The heart's action was not directly affected by any of the preparations. The chief as well as the earliest morbid changes appeared in the kidneys under the form of parenchymatous nephritis, followed by the interstitial form; also in the gastro-intestinal tract, where inflammation, ecchymoses, and swollen follicles were found. There were also morbid appearances in the blood and the spleen. In chronic cases the spleen was shrunken and the hepatic parenchyma had a cloudy appearance. Chromium was found to be absorbed both when given hypodermically and also when administered by means of the gastro-intestinal tract, at least when soluble compounds were employed. Chromic acid preparations were absorbed with great rapidity, both by the skin and the stomach. When in very small quantities chromic acid and its salts were reduced to chromic oxide. The elimination of chromium took place mainly by the kidneys, but also to some extent by the liver and bowels. Death was caused in acute cases by arrest of respiration and disturbance of the central nervous system; in chronic cases by morbid changes in the blood, the kidneys, and the digestive tract. Dr. Pander was unable to find any indication as to the value of chromium as a therapeutic agent.—*Lancet*, Nov. 12, 1887.

Ruttan on Poisoning by Bichromate of Potassium.—An Englishman, aged twenty-five, took about two ounces of bichromate of potassium in crystals, and was found in an outhouse vomiting, purging, and in great pain. When seen by the ambulance surgeon the vomiting had ceased. The patient was speechless and writhing on the floor, face contorted, and of a decidedly dusky hue, surface of the body cold, hands shrivelled and blue, respirations very rapid, mouth stained and filled with yellow fatty mucus. Vomited matter contained crystals of bichromate of potassium, but no blood. Abdomen retracted and tender. At the hospital, the

patient was given a hypodermatic injection of ether, as the pulse was absent at the wrist. An attempt was made to introduce a stomach pump, but the patient died a few minutes after removal and within an hour of taking the fatal dose. When seen an hour after death, cyanosis was marked over face and neck, pupils were dilated.

The autopsy was made forty-eight hours after death by Dr. Lafleur. He reported cyanosis marked. Veins of pia mater were found distended and filled with dark chocolate-colored blood and without clot. Brain substance normal. The liver was of an intense purple hue and hyperæmic. Small intestine contained olive-green mucus with shreddy pieces of a yellow color. Mucous membrane slightly inflamed, but no loss of substance. Large intestine firmly contracted and contained but little mucus, stomach filled with mucus of a greenish-yellow color. No signs of severe corrosive action. Lungs crepitant, dark brown, and very frothy on section. Heart contained three ounces of dark chocolate-colored blood without clot. Muscles very red; seventy-two hours after death rigor mortis still very marked.

The blood was found to contain everywhere the neutral chromates of sodium and potassium; of the organs, the liver contained most of the poison, but it could be also detected in the tissues. The substance of the liver and kidneys could be stained a deep chrome yellow on suspending them in dilute acetate of lead for a few minutes. The stomach and small intestine contained, precipitated in the epithelium and in the mucus, the insoluble green oxide of chromium. The blood was neutral. On spectroscopic examination it gave the absorption spectrum of methæmoglobin. The author drew certain conclusions which are summarized as follows:

(*a*) The blood alterations resulting in the production of methæmoglobin occur whenever the dose is large or the poison rapidly absorbed.

(*b*) That this action is peculiar to bichromates.

(*c*) Bichromates owe their rapid toxic action to this property, which they have in common with several other powerful oxidizing agents.

(*d*) Bichromate of potassium may, like pyrogallic acid, potassium chlorates, nitrites, etc., produce death without causing any symptoms of corrosive irritant action, by profuse blood alteration alone.—*Med. News*, June 2, 1888.

MISCELLANEOUS.

Guthrie (A.) on a Case of Acute Rheumatism in an Infant Eleven Days Old.—Lillia K., æt. 18, primapara, was delivered of a healthy male child on March 11, 1888. On the 14th she was attacked with severe pain in the umbilical region, followed by a light chill and high fever. Was very restless all night and sent for medical aid the next afternoon. When I arrived the pain was moderately severe and paroxysmal; there was marked tenderness over upper two-thirds of abdomen, but very little over other third. Temperature 102½°. Tongue furred. Breath offensive. One stool yesterday. Lochia normal.

℞ Hydrarg. chlori. mite. . . . gr. 6
Morph. sulph. . . . . gr. ½
m. Chart. No. 3.

S. One every two hours, to be followed in four hours by 1 oz. castor oil and gtt. x oil of turpentine; also hot fomentations to bowels.

This produced free catharsis and great relief.

On the evening of the 17th, I was again called, and found her suffering from acute rheumatism, involving both shoulders, left wrist, and both knee-joints. Abdominal tenderness had disappeared. Lochia normal. ℞ Sodii salicylat. gr. x, every two hours. Also, quin. sulphat. gr. v, every four hours, and pulv. ipecac. comp. *pro re nata*. Under this treatment she speedily obtained relief and was soon convalescent.

This much by way of its possible etiological bearings on her infant's attack.

During the night of March 21st, and all day on the 22d, her babe was restless, slightly feverish, and cried whenever it was handled. I supposed it to be colicky, and ordered a dose of castor oil, to be followed by gtt. iv doses of tinct. opii camphorat. as occasion required. Next morning the mother called my attention to its wrist, which was much swollen, slightly red, and on the slightest handling or flexing of the joint the child would cry as if in pain. ℞. Salicylate sodium gr. ss every three hours, and inflamed joint to be wrapped up in a woollen cloth wrung out of a warm solution of bicarbonate of soda.

March 24.—Swelling has somewhat subsided in left wrist, but right knee and up-

per part of leg are swollen this A.M. To continue treatment.

25th.—Condition unchanged. Salicylate sodium is inefficient, and seems also to disagree. To be omitted.

℞ Sodæ, bicarb. . . . . ʒj
Potass. acetat. . . . . ʒss
Aquæ menth. pip. . . . . ℥iij
M. S.—3 j every two hours, and continue camph. tinct. opium as occasion requires,

27th.—Swelling had almost disappeared from knee and leg, but wrist is still puffy.

28th.—Both wrists and hands are swollen this A.M. Child seems bright and moderately well nourished, and only suffers on handling the swollen joints. To continue treatment.

April 2d.—Has so far recovered that further visits are deemed unnecessary.

The hygienic surroundings were as unfavorable as possible. The house in which the mother was confined was cold and open, and the weather was cold and damp; her arrangements for fire were poor, as were also her food and attention. In addition to this, rheumatism was prevalent in the city. These facts, when taken together with the sudden appearance of the disease, the swollen, tender, and painful joints, its migratory character, its yielding to alkalies, and the absence, so far as I could determine, of a syphilitic taint in the mother, seem to me to stamp the disease as acute rheumatism, notwithstanding the tender age of the infant.

Longstreth ("On Rheumatism, Gout, and Some Allied Disorders," page 22) says: "Only one case has been recorded under the age of one month." Henoch ("Lectures on the Diseases of Children." Wm. Wood & Co., 1882. Page 311) reports a case at the age of ten months, which was also followed by hardness and contracture of the adductors of the thigh. Widerhofer observed the disease in a baby twenty-three days old, in the Foundling Hospital at Vienna—the only case of the kind that occurred among 70,000 children in eight years. Stäger met with it in a baby four weeks old. (See Ziemssen's Cyclopœdia, vol. xvi, pages 17 and 18.)—*Jour. Am. Med. Ass'n*, June 16, 1888.

Little (J.) on the Power of Saccharin in Preventing Ammoniacal Change in Urine in Chronic Cystitis.—For the past three years I have been asked, from time to time, to see a lady, nearly eighty years of age, who is quite confined to bed in consequence of chronic disease of the bladder, which gives rise to frequent and painful calls to pass water. The urine always threw down a copious purulent sediment, and, except when decomposition was prevented by treatment, was always ammoniacal. The lady has many times passed, with great suffering, phosphatic calculi, and, I have no doubt, many such exist in the bladder, but she has always refused to permit any surgical interference beyond the occasional introduction of a soft catheter, and the washing out of the bladder by a lady who acts as her nurse. Quinine and boric acid, when taken in fair doses, always purified the urine; but about three months ago her stomach became so irritable that these drugs could not be borne, and the washing out of the bladder by a weak warm sublimate solution could no longer be practised, as the passage of the catheter had become exquisitely painful. The consequence was that the urine became so offensive that the odor met one on the stairs, and the patient's attendants had often to leave the room to avoid being sick. In this difficulty it occurred to me to try saccharin. I directed six of the tabloids to be used daily. In three or four days the urine was no longer offensive. The patient has continued their use ever since, and the urine has not again become ammoniacal, though there is little, if any, diminution in the quantity of contained pus.

Since the foregoing case came under my observation, I have had four other opportunities of observing the effect of saccharin in patients who were passing ammoniacal urine. They were all males; one a case of catarrh of the bladder, in a paraplegic gentleman; one a case of chronic cystitis, with enlarged prostate; and two cases, in which there had existed stricture of the urethra, but in which, although a surgeon had successfully dilated the stricture, the urine remained ammoniacal. In all these cases the saccharin was distinctly useful, but in all its administration had been combined with the daily use, by the patient himself, of a catheter, so as to prevent the accumulation of residual urine in the bladder—a precaution without which no drug will, I think, prevent decomposition of the urine.—*Dub. Jour. Med Sci.*, June, 1888.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital. CONDICT W. CUTLER, M.D., Instructor in Diseases of the Skin, Post-Graduate Medical School, New York.

VOL. V., No. 27. July 5, 1888. WHOLE No. 75.

CONTENTS.

	PAGE
Deutsch-Medicinische-Schrift-Such; or, the German Medical-Journal Habit	317
Miscellaneous	327
Publication Notes	328

DEUTSCH-MEDICINISCHE-SCHRIFT-SUCHT, OR, THE GERMAN MEDICAL-JOURNAL HABIT.

DR. JOHN S. HAWLEY, M.D., ETC.

Being the Anniversary Address delivered before the Hospital Graduates' Club, at the Annual Meeting, May 17, 1888.

The unprecedented advance of the present age in arts and sciences, in the development of old and the inception of new ideas, in the increased facilities for the attainment of the pleasure, luxury, and comfort of the community, has borne with these blessings the curse of a more or less serious physical deterioration of the existing generation. The fierce struggle for preëminence in business or professional standing, the feverish effort to acquire extended reputation or vast wealth in a short time on the part of individuals, and the consequent increase of pressure brought to bear on the nervous system,—all these have resulted in an increased prevalence of those functional derangements of the nervous system which we call neuroses. Were this increase confined to those disorders the nature and treatment of which we understand, the matter would be bad enough. But when we appreciate the fact that new diseases are constantly making their appearance, it behooves us, as physicians, to earnestly investigate the pathology and prophylaxis of these deadly enemies of the physical and mental health of the community. Such neuroses as "coupon-cutter's paralysis," "poker thumb," "quiz-master's profanity," "libidinomania," or "C——'s disease," are too prevalent to permit us to sit with folded arms as calm observers of interesting phenomena, rather than active promoters of the public weal. Most especially to be deplored is the melancholy fact that professional men, notably physicians, are too often the subjects of these mysterious disorders of mind and body; and it may well be viewed with alarm that men in whose keeping is placed the lives and health of the community should so frequently fall victim to the ravages of hidden and unsuspected disease. Impressed by this fact, therefore, the writer has ventured to submit to you a crude and imperfect account of what he believes to be an as yet undescribed disease, hoping thereby to elicit your comments and bring to your notice an interesting subject for observation, experiment, and conjecture. Doubtless a laudable ambition to place on record the discovery of a new disease has exercised no insignificant influence over the writer in his preparation of this paper, and though a conjectural pathology and but few clinical facts are all he can offer, he deems the latter so significant as to warrant him in directing to them the attention of the profession, in the hope that more able minds and more acute powers of observation may thereby be devoted to the further investigation of the phenomena characterizing the neurosis he has tentatively named Deutsch-Medicinische-Schrift-Sucht, or, The German-Medical-Journal Habit.

This disease, as observed by the writer, presents both congenital and acquired forms, the former being of slight importance, for, heredity and nationality being the essential and determining elements, the symptoms are of such character as to excite no suspicion of the existence of a morbific influence. It is to the acquired form that your attention is invited, as the

attendant phenomena are well marked and distinctly abnormal.

The *pathology* is as yet mainly conjectural, though there is strong evidence in support of the theory that the disease is of bacterial origin. The examination with a low-power objective, or even the naked eye, of sections made from the published articles of some patients, and stained with a solution of horse-sense, has revealed the presence of a nine-jointed, red-eyed, and somewhat guttural bacillus, distinctly marked with a black "uhmlaut," and bearing a striking resemblance to the so-called "mental worm" commonly found in the writings of some theorists. There is much variability in both their number and magnitude. If we accept the "bleistift" as the unit of linear measurement (I am informed by Dr. P. that it is the established standard among German bacteriologists), the micro-organism measures from 2.5 to 420.3 micromillibleistifts; or, to use our own system of mensuration, approximately the size of a small piece of chalk. Attempts to produce a pure culture have as yet been abortive, the bacilli evincing no tendency toward colonization or even reproduction. Inoculations of sterilized literature have given only negative results, as has been the case in experiments on the lower animals, a brief account of which the writer is able to give through the kindness of his friends, Drs. X—— and Y——, who are interested in the industry of raising fancy breeds of medical students. These animals, as is well known, being congenitally sterilized, were admirably adapted for these researches, and, at the request of the writer, all individuals showing abnormal tendencies toward application, and all those evincing an intelligence above that of the average specimen of the breed, were made the subjects of separate and repeated experiment. On several occasions one or two litres of these bacilli were turned loose among the students with no apparent result, or at least with none bearing on the question of the pathogeny of the affection. There was observed an increased tendency to answer "unprepared," or to entirely absent themselves at intellectual meal-times, on the part of a few of those inoculated, while others evinced either a frozen and stony stoicism, apparently dependent on the atmospheric conditions present just before the cyclonic storm attendant on the annual examinations, or a strained and ghastly facetiousness, marked by the perpetration of such paleozoic and glacier-grooved witicisms as "What is the function of the appendix vermiformis?" or "What is the number of the tarsal cartilages?" and the indulgence in transparently fraudulent mirth, should some victim, not versed in antediluvian lore, be led by these decrepit lures to self-immolation on the weather-beaten and time-stained altars consecrated to the memory of the merry jests of the deceased Past. Similar phenomena, however, were observed in those individuals not subjected to inoculation, and therefore the conclusion that the bacilli are a *post hoc* —mere footprints of the morbific influence —and not a *propter hoc* becomes irresistible. At all events, we must conclude that the spores or active members of the species must be sought elsewhere, possibly in the literary dejections of patients afflicted with the congenital form of the disease. Though no necropsy has been had in an uncomplicated case of the disease, it is probably true that no tangible organic change, either in gross or microscopic morphology, exists, as no symptoms of any derangement of the vital functions, not dependent on intercurrent disease, have been observed. We are, then, justified in the conclusion that the affection is a neurosis, pure and simple, and not an organic degeneration or neoplastic growth affecting the cerebral tissue. Some day we may rend the veil which shrouds this morbific principle, and understand the action of the fatal influence it possesses over the intellectual faculties of many of the most brilliant minds of our time.

The chief etiological factor in the production of this morbid condition appears to be a brief sojourn—from three months to one and a half years—in some one or more of the medical centres of Germany or Austria. Still, this is not essential to the development of the affection, as many of the most aggravated and obstinate cases observed could never have been surrounded by any stronger Teutonic influences than exist in Hoboken, or that tract of territory suburbal to Glen Island, known as Klein Deutschland. Imitative tendency undoubtedly exerts a powerful etiological influence, as does also a desire to pose as a prolific contributor to medical periodicals. Further research may reveal other causes, but at present this is the extent of our knowledge in regard to this point.

Though the symptoms of the disease, in its later stages, are identical in all the forms, the prodromatic and early manifestations of the presence of a morbific process show a marked variability. In some cases a distinct period of incubation has been noted, while in others the pathognomonic symptoms of the confirmed habitué have suddenly appeared like a thunderbolt from a clear sky, constituting the so-called "fulgurating form" of the disease. Therefore the invasion may be insidious, exciting little or no attention, or characterized by sudden and violent initial manifestations, identical with or closely resembling those of the fully developed affection. The neurosis presents so many types, and follows so erratic a course, that a complete and exhaustive description of its various degrees of virulence, as observed in individual cases, would be far beyond the scope of this paper, the *motif* of which is to present a general account of the principal phenomena observed, and not a minute analysis of fact or theory. Characteristic features of the affection must be discussed, if only to prevent errors in diagnosis, which might place under a degrading suspicion worthy individuals who exhibit ephemeral or phantom symptoms. The writer craves your indulgence should his account of the symptomatology prove prolix, or his comments unnecessarily verbose.

Generally considered, the history of a typical case is as follows: After graduation from a medical school, and perhaps a subsequent service as interne in some hospital, the patient is led to report a case or cases of unusual interest, which may have been under his observation. In preparing his paper he will consult the literature of his subject, and will notice a vast number of German names, both of individuals and localities, and a multitude of references to German periodicals, in which articles bearing on the matter under consideration have from time to time appeared. He has now been exposed to the miasm of the disease, and during the period of incubation he is satisfied with a simple, condensed resumé of the opinions of authorities, with perhaps a modest commentary based on his own observations. Should this be of such merit as to elicit the notice and comment of other writers,—always so flattering to the young author,—he will soon put into commission yet other literary argosies, until the first stage of the disease —chronic contribution to medical journals —is reached. But now if his articles be examined, and his remarks noted, it will be apparent that less attention is given to the *work* or *opinions* of authorities, and more and more specific mention is made of their *names*, and of those of the periodicals in which their observations have been recorded. The more orthographically complex the name or title, the more prominently is it brought out, and the more unimportant the theory, or uncanny the practice, the more vigorously is it advocated. Indeed the general law governing this symptom may be expressed by the mathematical theorem—that the importance given to the opinion of an authority varies directly as the difference between the squares of the number of the consonants and vowels in his name.

At first these pathological foci appear in scattered foot-notes, or in shrinking italics in the text; later, wandering cells, such as uhmlauts and misapplied capital letters may be observed; then the foot-notes proliferate, and infiltrate the normal tissues of the articles, and, finally, syntax and euphemism are thrown to the winds, and the very sentences are so gruesomely and reticularly constructed, that they might well serve as knotted lashes to the whip with which foul fiends might scourge the lost soul of Lindley Murray. Now also is observed a tendency to settle all moot points by the simple arithmetical process of subtracting the number of the minority of German authorities from that of the majority of the same, irrespective of the merits of the case, or by the equally ingenious expedient of constituting the prevailing German opinion a standard, rejecting as illogical and worthless all the evidence furnished by scientists of other nationalities,—should it fail to amalgamate with the established standard. An eruption, petechial in character, not affected by pressure, of asterisks, daggers, double-daggers, and the like, has been observed as a common attendant on these histological and pathological changes in the articles; but its variability as to extent and distribution renders it too indefinite to be of value as a diagnostic sign. These peculiar abnormalities of composition can be studied at leisure; but the morbid process may be also detected by carefully noting the manner in which the patient reads his articles in public, or speaks when participating in the discussion of the

papers of others. It will, under these conditions, be apparent that he will evince a tendency to emphasize all German names; soon, names of *all* authorities, save those of German, Polish, or Russian extraction—or indeed almost all names which show in their physical structure any weakness for the harboring or fostering of vowels (or even a "bob-tailed straight" of consonants), are slurred over rapidly and apologetically by the speaker, while boldly, sonorously, and unctuously he rolls under his tongue the musical diphthong and the cooing guttural of the Vaterland. Proper names only, at first; but as the depraved tendency grows more marked, and the will becomes more subservient to the dictates of the vicious influence, he openly mentions such accursed titles as "*Die Centralblatt für Chirurgie*,—abating not a syllable or an uhmlaut,—"*Berliner klinische Wochenschrift*,"—with never a blush or stammer,—and yet others of like import, the very thought of which he had formerly considered but little better than blasphemy.

The habit is now well established, and the patient is often seen in public, bearing a grave, introspective expression and a large paper knife, with which he cuts the leaves of a German medical journal, carefully holding the paper so that the title may be visible, and with others of the same Teutonic origin protruding from the outside breast-pocket of his coat, so disposed that there may be no possibility of a mistake as to their character as foreign medical journals, on the part of those who may notice the display. This symptom is especially prominent when the patient has returned from a recent trip to the continent, and is often associated with a tendency to allude in his articles to "my friend Schroeder," or to embellish his every-day conversation with such reminiscences as "the dinner given me by Teddy Billroth"; or "the musical character of Esmarch's snore, which I heard when we slept together during the week I was his guest." He often relates anecdotes of Volkmann's iron nerve in raising Virchow twelve pfennigs on a simple pair of deuces; and Czerny's phenomenal judgment in calling the turn, or shifting his stack of three (3) marks from the red to the double zero, just in time to escape ruin and suicide. He may be so discrete as to refrain from mention of the amorous dalliance he may have had with the highborn (or *hochwohlgeboren*, he calls it) ladies of the various courts at which he has been the honored guest of Royalty; but too often his veracity runs away with his discretion, and he darkly insinuates that, were the truth but known, the proud escutcheon of many an infant heir-apparent would bear, party per bend sinister, the yellow dog proper, currant, with tail couchant, oppressed with a tin kettle argent, of the ancient Dennis family,—the arms which he, as rightful heir to its name and fortunes, blazons on his underclothing as a reminder to his laundress.

In many cases, a peculiar symptom makes its appearance at this stage. The patient evinces a morbid tendency to trifle with the fundamental constituents of his patronymic—such as the parting of his name in the middle, so that James R Smith becomes J. Robinson Smith; or, in extreme cases, and only in those which have been aggravated by an intercurrent trip to Germany, one may notice the occurrence of an amœboid movement in the patient's signature, resulting in the extrusion and final separation of a process, which ultimately presents to the naked eye the characters of a neoplastic "Van" or "Von." This often develops, in its turn, a supernumerary "der," and the pathological signature becomes J. Robinson von der Smith. This dalliance with what the healthy individual looks upon as a more or less constant quantity, occasionally results in a degenerative or retrograde, instead of a proliferative metamorphosis. Assuming, for the sake of illustration, the patient's name to be G. W. D. Mudd, the following history will show this process in its classical form:

CASE.—If, early in his professional career, this patient had, subservient to the dictates of a temporary necessity, utilized a pile clamp as an uterine dressing-forceps, and, finding the instrument to be unexceptionable in grip, and of insignificant intrinsic value, had the joint mechanism so changed that thorough cleansing was rendered more easy than with the original model, he would then publish an article containing a description of the minute anatomy and great capability of the instrument, signing it G. W. D. Mudd, M.D., etc. Soon other brochures from the same facile pen would appear—indeed, very soon,—and presently the published reports of the transactions of various medical societies would fairly bristle with notices of papers read, and remarks by, successively, Dr.

George W. D. Mudd; Dr. George W. Dennis Mudd; Dr. G. Washington D. Mudd; Dr. G. W. Dennis Mudd; Dr. George W. D. Mudd; Dr. Washington D. Mudd; Dr. Washington Mudd; Dr. G. W. Mudd; Dr. Dennis Mudd, and Dr. Dennis-Mudd. The atrophic change may even result, at last, in the conversion of this strong, vigorous signature into an asthenic and senile Doctor Mudd. The cause of this curious symptom is uncertain—but various theories have been advanced as explanatory of its occurrence. The time allowed me has passed so rapidly that I cannot now discuss them, although the investigation might prove interesting.

The symptoms are always modified, and usually aggravated by association with fellow-victims of the habit. Should two victims meet in the presence of those unaddicted to the habit, the result is exceptionally painful. Eagerly the two sufferers hurl at each other names of individuals and journals of immeasurable length and unspeakable cacophony. More and more discordant grow the words they utter and over which they gloat with an unholy joy. The bystanders strive to escape by incontinent flight, but mayhap are rooted to the spot by a fatal fascination; strong men tremble and grow pale, and with quivering, ashen, lips beg for mercy in feeble, stammering accents; but the hardened and confirmed votary of this accursed vice turns not a hair. With ghoulish glee he clove-hitches his tongue about his uvula, firmly fixes his posterior molars, subducts and tightens his vocal cords, gives his diaphragm a short run, and pours out a list of more unutterable atrocity than he has before attempted. Efforts to stem this dissonant torrent are futile. Should the attempt be made to control this symptom by plying the victim with strong drink, hoping thereby to give relief, even through inebriety, the result is disastrous. The malign influence is sustained and strengthened by the alcoholic stimulus, and instead of exorcising one devil, the experimenter has evoked a legion, of which the least malefecent is infinitely worse than the original demon. To the credit of our civilization be it said that there is no recorded instance of summary vengeance wreaked upon an unfortunate victim of this dire phrenopathia by an outraged community. But even the worm or inert banana peel may turn when trodden upon, and latter-day Jobs are as infrequently met as the teeth of the domestic hen. Let these poor sufferers have a care lest they goad a long-suffering people into savage, unreasoning action, and, sowing the wind, reap an irresistible and poorly-discriminating cyclone.

In the later stages of the disease, when the last strand of the bond which has held the patient to partial recovery has parted, and his slavery to the vice has become absolute, there is often observed an apparent remission, or even intermission of the symptoms. For example, he may publish an article of such large scope as to necessitate a "continuance in our next." The first installment may show no evidence of the mental taint. The sentences are constructed in accordance with the ordinary rules of English grammar. The connubial relations of the nouns and verbs are not strained, nor is there any sign that any one has unlawfully tampered with their domestic affairs. The cases cited and authorities quoted are of various nationalities, and no discrimination in favor of those of any one race can be discovered. Indeed nothing that would indicate any impairment of the author's mind will be found in the perusal of the first moiety. At least such is the verdict of the reader, whose examination is superficial, or who is unacquainted with the history of the case. To the trained eye of the specialist, however, and especially when he has already had the case under observation, the trail of the serpent is distinctly visible. Sinuously winding around and between the lines it goes, blasting here an elegant well-turned phrase, blighting there an acute and scientific observation; now, treacherously embracing the theory or stated discovery of some Anglo-Saxon authority; again, sullying with its foul slime the pure name of some reputable and able periodical or monograph of English or American origin; anon destroying by the defacing marks of its rough, scaly track, the polished surface reflecting the principle of humanity in medical and surgical practice, as opposed to indiscriminate operation without regard to the life or rights of the patient; and, at last, ending in the mark of a coil, as though the venomous reptile, after stealthily creeping over the whole subject and searching out all of its vulnerable points, had finally driven its deadly fangs into the vitals of its helpless victim. The article may have excited general interest in medical circles,

and its conclusion may be anxiously awaited by hundreds of physicians. It may have promised, by its clear, scholarly arguments and deductions, to settle some disputed question or to illumine some obscure region of medical science. No premonitory signs of danger are apparent, and a general feeling of relief and of false security prevails, only to be utterly and ruthlessly destroyed. The second part of the article appears, and comes only to rend the vitals and lap the blood of the confidence inspired by its predecessor. The scientific, euphemistic, grammatical Dr. Jekyll has given place to the monster, Hyde ; and, as with incoherent sentences, blasphemous statements, demoniacal spite, and hellish frenzy, he tears his quivering victim into shreds, hugging himself and gloating over his diabolical work, he dances a demon can-can over the mangled remains, and howls out a maniacal pot-pourri of German names, German theories, German sophistries, German practice, German malpractice, German nonsense, German lies, German conceit, German criticism, German controversy—until at last, when even he is satiated with gratified malevolence, he may unwillingly and under his breath add one poor, friendless, despised atom of German sense and truth. But carefully withal, for he jealously hides it in some insignificant foot-note, squeezed in among glaring and tawdry statements, and so hedged about with blatant and self-assertive matter, that it often escapes notice, as may the gleam of pure gold be obscured by the garish glitter of pyrites, escaping even the practised eye of the experienced miner, while the tender-foot gathers in the worthless mineral with feverish avidity, ignoring with contempt the dull lustre of the royal metal, only to see his "fool's gold," on which he had based his delusive hopes of vast wealth, crumble into dust, with an evil odor at the touch of the acid which can never be deceived by pretence or fraudulent claim. Over the disfigured and distorted corpse of what promised to develop into a practical and able treatise, the true-hearted physician mourns, and with earnest endeavor strives to rescue from the ruin what of good he may. It comes with the smell of infernal fire upon its raiment ; it comes with an unclean, leprous taint sullying its purity ; with its self-respect impaired, its reputation spotted, and its innate buoyancy hampered by evil associations. And why not? Who may touch pitch and not be defiled? Who may be reared among thieves and swindlers, denied all semblance or even trace of moral instruction, and yet become in an instant a useful and desirable member of society? No, the truth must be cleansed of its defilement, and the man be purged of the criminal tendencies induced and fostered by his vicious training, before the one can be accepted or the other rated at his true value.

During the progress of the disease the patient has shown no outward sign of physical or mental derangement. The eye is clear and bright, the nerves steady, the assimilatory and excretory functions are normal. The intellect is unclouded save in matters medical, and he will never be even an object of suspicion if he refrain from writing or talking on medical subjects.

He may, therefore, keep his degradation secret, and preserve his reputation for manhood, even though he really be the servile votary of a hidden, disgracing indulgence, which saps the life of his better nature, and warps his fair, reasoning judgment. At heart he is corrupt, and his respectable demeanor is but the whited covering of the charnel-house, wherein rots and stinks his foully slain moral nature. It may be that some dim recollection of the moral training of his boyhood restrains him from any public manifestation of his vicious tendencies. Perchance a faint odor of the incense which arose from the simple child-prayer he was wont, many years ago, to lisp at the knee of a gentle Christian mother, yet lingers about the chambers of his memory. Mayhap all the brain-cells in which were stored the precepts inculcated by his Sabbath-school superintendent, or his kindly, white-haired pastor, have not yet become protoplasmic and divided. Perhaps some indistinct trace of the faithful and unremitting instruction, as to the duty of keeping to the path of rectitude, impressed upon them by the erudite village schoolmaster, are even now retained by the terminal cutaneous filaments of his gluteal nerves. Whether or no some such leaven permeates his being, and causes him to shrink from publicly participating in the sacrilegious orgies of his more shameless and hardened fellow-sufferers is, however, a question for the Moral Scientist to decide, not for the

Physician to debate. Happily, the community is spared the pain which the knowledge of his true character would bring,—for only in the privacy of his own home, away from the ken of his fellows, does he sacrifice to the false gods. Only in secret does he bow himself down before Baal.

Many cases have been observed, presenting symptoms at variance, in matters of detail, with those of the classical type just described. There are aggressive, insinuating, statistical, ephemeral, simple continued, epileptiform, relapsing, ataxic, and algid forms, the latter being characterized by a low, muttering delirium when speaking, and a marked typhoid style of composition when writing. The distinguishing symptoms of these varieties of the disease are indicated by their several names, and need no further description. Acute, chronic, simple, and pernicious forms vary in degree rather than in kind. The disease may terminate by lysis, very rarely by crisis, but never, so far as is known, by collapse or inter-current disease. Complications are rare, as the peculiar nature of the disorder renders it incompatible with any of the self-respecting diseases. The chief or probably the only complication, and which also partakes of the nature of a symptom and a sequella, is a peculiar neurosis, often congenital, known as megalocephalia—"the big head,"—the characteristic symptoms of which are too well known to require further mention. It is quite constant in occurrence, and, when present in cases of the aggressive or statistical variety, constitutes the most aggravating and intolerable types of the disease.

Prognosis is bad. Cases of apparent recovery have been noted, but sufficient time has not yet expired to exclude the probability of relapse.

The *treatment* should be mainly prophylactic. Either German periodicals must be withheld, or the articles written by the patient carefully edited, eliminating all suspicious or distinctly morbid matter. Whenever the patient shows prodromata, or initial symptoms, he should be surrounded by home influences, moral books of light and unexciting character should be given him in lieu of contagious literature, and wild, heretical German ideas and alleged discoveries should be derided and disproved. Moral treatment lends the only hope of ameliorating the symptoms, and eradicating the subtile and malign principle, which is wrecking the active and healthy mind, undermining the morality and enslaving the will, ere it has permeated and corrupted too thoroughly to be removed.

Therapeutic measures have been successful only to a degree comparable to that attained by the pursuit of that classical method of managing a hostelry, which owes its conception and historic importance to the fertile and versatile genius of Quigley.

Enough has been said to excite the attention and arouse the vigilance of thinking men. The individual symptoms have been familiar to us all for some time, though we have hitherto failed to grasp their significance as parts of a whole, and have regarded them as mere personal eccentricities rather than as diagnostic signs of an insidious disorder of the higher cerebral functions. Let us, then, from this time devote our best energies to the study of the prophylaxis of this vice. As professional men, we have discovered the presence of a secret enemy, working in the darkness to undermine our reason and sap the vitality of our intellects. As humanitarians, we should strive to crush the foe which is perverting the morals and distorting the perceptions of our fellow-creatures. As individuals, animated by the God-given right of self-protection, let us in the name of all we hold sacred; as we value a spotless character and an unassailable reputation; as we esteem a sound mind and a clear conscience, strain every nerve to annihilate this monstrous devil-fish, ere we ourselves are seized by its writhing, snaky tentacles, and forever lose our mental liberty and be disenfranchised of our very will-power! Brothers! shall we, without an effort to resist, be drawn into the insatiable maw of this unclean beast? Shall it be truly said of us by posterity that we meekly bent our necks to this loathsome yoke; that we sold our birthright for a mess of nutrient gelatine and a culture of foul staphylococcus pyogenes; that we were dominated by the autocratic dicta of men destitute of vowels, and couched in a language, the pronunciation of which demands that we shall gag in the midst of every third word, and the construction of which necessitates the employment of a Parisian detective and a trained dog to hunt down the verb governed by a given noun? Shall our children develop

spectacles and bristling hair before our eyes? Shall the matutinal use of a shoehorn be essential to the establishment of harmonious relations between the American head and the American hat, when we read in the *Wratsch* that Chrzonsczewsky, when engaged in cultivating the bacilli of the *Fag Communis*, found that when Culmbacher was added in excess to a culture in Laubenheimer, there was precipitated a polymorphous and anhydrous *Katzenjammer?* Shall we deny to our gluteal furuncle the emollient influence of a poultice, but cover it instead with malodorous iodoform and harsh antiseptic gauze, suffering grinding torments the while, because, forsooth, some wire-haired, hypermetropic, punperpetrating, Limburger-cheese-scented, iconoclastic, diarthric, physogenic Dutch El Mahdi has said that the only rational or scientific treatment of a boil was to destroy the bacteria which produce it? Shall our peerless American eagle stoop from his aërial throne, high up under the azure vault of heaven, and exchange God's pure oxygen for the polluted, ammoniacal atmosphere of the barn-yard, marring the beauty and efficiency of his tail-feathers by sitting on its encircling barbed-wire fence, or grubbing for worms side by side with a dung-hill hen? Shall he rear his royal brood on liver-wurst and decayed fish spawn, until he flies from his lofty eyrie with a scream of disgust and shame, at the sight of the transformation of his progeny into split monstrosities, fit only for the degradation of exhibitions as "freaks" in a Bowery museum, and bearing a faint and bastard resemblance to the Austrian Buzzard? No! brothers, no! If we must leak, let it be at the spigot and not at the bung; if we must immolate the children of our minds, let it not be by casting them, our scientific ewe lambs, into the incandescent arms of this obscene Moloch, or under the crushing wheels of this pseudo-scientific Juggernaut. Too long already have we submitted to the rule of this Veiled Prophet, and lived on the hopes his specious and deluding promises have inspired. Too long have we submitted to the concealment of the lineaments which we have been taught by him to believe to be too dazzlingly glorious with supernal light for our mortal, unaccustomed eyes to behold with safety. The time has come when we must tear from his face the glittering silver veil, the radiance of which has lured us so far from the paths of virtue and integrity, and expose to the horrified gaze of his deluded, betrayed, and lost followers the unutterable hideousness and diabolical expression of that face they had so ardently longed to see, as the richest reward they could receive for their unquestioning obedience to the unholy mandates of their ruler.

The furuncle of the Magyar, the oppressed Pole, the down-trodden Russian serf, may be, as a result of existence in the mephitic and besotting atmosphere of an effete monarchical government, such a poor, spiritless shadow of its original self as to cringe and submit to the influence exerted by a mere antiseptic application; but the free-born, unfettered, independent American Boil, flourishing in the free air and under the bright sky of our own Columbia, laughs to scorn any such attenuated hint of threatened coercion, and rallies round its central core, yielding not a micromillimetre till it has worked its will. Let us not, then, despise the good old bread-and-milk poultice of our mothers, or replace with a cumbrous, inconvenient, and evil-smelling antiseptic inhaler, the honest, fragrant, palatable, and efficient "rum and gum" of our fathers. Remember the millions of puny infants who have developed into robust and healthy adults, even though the milk on which they were fed was not sterilized, or the diapers they wore constructed of iodoform and bichloride gauze. Pink eye, Foot-and-Mouth disease, and Bots *may* lurk *perdu* in every cubic inch of air we take into our lungs; but are we any happier for the knowledge, or any the less healthy despite the fact? The question before us to-day is pregnant with good or evil as we decide it. Shall we go on in the attempt to gather grapes from thorns, and figs from thistles? Shall we go on as emasculated disciples of wild, irresponsible, unprincipled empirics, who sink every feeling of humanity, and sacrifice, without a pang of remorse, any number of human lives necessary, in their desire to pose for one short month or year as discoverers (God save the mark!) of a new principle or method of treatment, repeating the process as often as the former theory or practice has been plunged into a merited oblivion?

Shall we blindly follow an erratic light until we stick fast in the ooze and slime of a dismal swamp, and find, too late, that we have been misled by a tricky will-o'-the-

wisp? Shall we, when accosted by the self-introduced son of the friend of our boyhood, go with him around the corner in order that we may assist him in the transportation of the shekels of gold and of silver which he has just won in a lottery? Shall we mortgage our property and compromise our reputations in order that we may buy "green goods," and then find that our purchase of crisp, unexceptionable bank-notes has been transmuted into an undesirable and meretricious brick? Will not the physician of a century hence mockingly laugh at our crude methods, even as do we at those of the purgers, vomiters, and bleeders of long ago? And if this be the truth, let us, at least, blunder gracefully, and not plunge headlong into every pitfall dug in our path by unsupported theory and unjustifiable practice. If we allow this unhallowed principle to dominate our thoughts and actions, shall we not figure, in the eyes of posterity, as poor victims of a literary miryachit, forced to imitate the grotesque antics of our masters, and to conform to any model set by them, be it ever so absurdly impracticable or colossally fraudulent,—objects of the pitying contempt of contemporary and future scientists? Shall we so act as to deserve the ridicule embodied in what will soon become a proverb—"When the German pipes the American dances"? Must we, when apologetically intimating that we still live, present a list of unpronounceable German authorities to sustain our position?

O even if our souls *be* actually in pawn, let us, in decency, keep the tickets in our pockets, and *not* pin them so conspicuously on the lapels of our coats, brazenly flaunting the shameful badge of our servile bondage, as though we gloried in our degradation, and were seeking the means of access to a level even lower than that to which we have already sunk. Let us not fall into line at the crack of the German whip, or barter our self-respect for the poor boon of an humble place in the train of a foreign autocracy, and the grudged permission to follow the chariots of our masters with an iron-lipped canvas grip-sack and a dissipated whisk-broom, to clean up and hoard the filth they leave upon the highway, animated by the forlorn hope that we may semi-occasionally light upon a plugged quarter, or even an eighty-eight-cent silver dollar!

Can it be that we are so enmeshed in the folds of the fatal net, which has been set to ensnare our heedless feet, that we must depend on some deliverer for our freedom? O will there not, then, from our number arise some some valiant Theseus, who will slay this hybrid minotaur, even in the most secret recess of the labyrinth, the intricate mazes of which have so long protected him from attack; some Hercules, who will twist the tail of this ravening Nemæan lion, and give us the monster's skin for a carpet to our feet; some Œdipus, who will solve the riddle of this sphinx, and end its career of insatiable lust for murder; some latter-day St. George, whose strong right arm and trenchant sword will quench the deadly flame vomited out upon us by this hideous dragon; some Pied Piper of Hamelin, who will charm away the rats which infest our garrets; some Moses, who will lead us safely through the wilderness, raising up a brazen serpent for our salvation; and some Xenophon, to compute and record the number of parasangs we shall daily travel in our exodus from the land of bondage?

Who will cleanse this Augean stable of medical science? Who will drain this Pontine marsh? Who will fell this deadly Upas tree, with spreading roots so deeply planted in our soil, under the noisome shade of which we have so long lived, unconsciously inhaling, with every breath its noxious emanations? Who will strike down this Vampire Bat, which even now is hovering over our slumbering, unprotected intellects, watching its opportunity to suck the very life-blood of its unsuspecting prey?

O for some Arthur Pendragon to establish in our midst an order of the Round Table, and, with his blameless knights, hew down the groves, demolish the high places, and shatter the idols of wood and of stone, to which we have sacrificed,—duped and unresistingly led by the crafty, unscrupulous hierarchy, which has established and disseminated the tenets of this godless creed, celebrating its demoralizing rites at the unhallowed altars, with which they have sacrilegiously desecrated our own sanctuaries! O for an Inspector Byrnes, to pull this scientific bunco game, and expose the methods and personalities of its steerers! O for a Jefferson, to write our Declaration of Independence; a Toussaint L'Ouverture, to head our revolt; a Jim Bludso, to hold the nozzle of our burning boat "agin the bank, till the last galoot 's ashore!"

Brothers! is it not enough that the sacred quiet of our homes, and the busy hum of industry of our streets, should be profaned and disturbed by the unspeakable discord of the itinerant German band, which, not content with the serration of the edges of our auditory nerves, must need exact a tribute from our pockets? Or must we erect in our temples, dedicated to medical science, noble shrines for the bull-horns and tin-whistle gazoos of a blatant and dissonant orchestra of so-called scientists? No! a thousand times no! Let us strike down the guard, gain the mountain passes, and defy our former tyrants; no longer disregarding our national traditions; no longer dragging in the filthy mire our national name and the bright stars and stripes of our gloriously beautiful national ensign; no longer forgetting our national anthem,—so that the echoes of our eternal cañons and majestic mountains shall once again gladsomely resound with the harmonious and soul-inspiring melody of our own "Yankee Doodle," and never again be compelled to unwillingly answer to the doggerel gags and vaudeville air of the Wagnerian topical song:

If we write so that nouns with their verbs don't agree,
That 's German, you know, quite German, you know.
If our meaning obscure and involved seems to be,
It 's German, not English, you know.
But that kind of writing you read in Berlin,
In Heidelberg, Wien, where we 've frequently been,
Don't mind how you end, if you only begin,—
Is German, quite German, you know.
O the queer things we do, and the queer things we see
Are German, you know, all German, you know.
No man in this wide world a surgeon can be
Till he 's German, all German, you know.

We spend all our money to emulate Koch,
He 's German you know, born a German, you know.
We cultivate germs tho' our raiment we "hock"
With our uncle, who 's German, you know.
We bully our confréres with Volkmann and Braun,
With Virchow and Schroeder their arguments down,
And we knock them all out with Esmarch's renown,
They 're Germans, native Germans, you know.
O the queer names we hear, and the queer names we quote,
Are German, you know, all German, you know.
We speak them, tho' each gives us a pain in the throat.
For they're German, true German, you know.

We take out the stomach and resect the gut,
That 's German, you know, quite German, you know.
The leaves of the journals in public we cut,
When they 're German, true German, you know.
Our talk has a bacteriological drift,
We pay "twenty marks" for a pipe, for a gift.
And we quote from the *Berliner klin. Wochenschrift*,
Which is published in German, you know.
O the marvelous statements that come from afar,
Are German, you know, all German. you know,
But of course it 's all right if it 's German—*nicht wahr?*
That 's the German for "aint it?" you know.

We think it improper to poultice a boil,
No German, you know, would do so, you know,
And we make salad dressing with carbolized oil,
That 's the custom with Germans, you know.
With carbolic inhalers we muzzle our jaws,
We wear underclothes of iodoform gauze,
We ignore the effect, and talk big about cause,
Which the Germans do always, you know.
O the queer things we do and the queer ways we live,
Are German, you know, all German, you know,
Of squaring the circle the method we 'll give,
Or some German will give it, you know.

We consider a coccus the cause of a gleet,
That 's German, you know, quite German, you know.
We dress a cut finger in a haystack of peat,
That 's German, true German, you know.
We put in a gum larynx and a celluloid tongue,
We exsect the spleen, and we resect the lung,
We save at the spigot, and leak at the bung,—
O we 're German, we 're German, you know.
But the queer way we feel when we count up the slain,
Is not German, you know, no, not German, you know.
And we 've not enough nerve yet, to exsect the brain,
As the Germans will soon do, you know.

We write in the journals a great deal of rot,
As do Germans you know, tho' they 're Germans, you know,
And we seek a small pin in a ten-acre lot,
For the Germans can find one, you know.
We discard the choice meat and chew on the bone,
We refuse the good bread and grasp at the stone,
We hoard oyster shells and the pearls leave alone,
That 's German, true German, you know.
O the queer things we do, and the queer things we write,
Are German, you know, all German, you know.
We will swear that the ace of the spade suit is white,
If some German but says so, you know.

On sterilized pap our young infants we feed,
That 's German, you know, quite German, you know,
And we hope by such means to improve on the breed,
For the Germans advise it, you know.
In training a puppy, or raising a foal,
In the search for an office, or the seat of the soul,
Or how to fit a square stick to a circular hole,
We get points from the Germans, you know.
O the queer tricks we play with our young babies' milk,
Are German, you know, all German, you know,

Of sow's ears we make purses of superfine silk,
By a process that 's German, you know.

We pour down the beer as tho' filling a tank,
That 's German, you know, true German, you know.
And we eat Sweitzer Kase and Limburger rank,
That 's German cheese with the gangrene, you know.
Frankfurters we love, and sauer kraut, too,
And we make no mistake when the spring Bock we brew,
But we bite off more science than we ever can chew,
When we follow the Germans, you know.
O for the queer things we eat, and the good things we drink,
Thank the Germans, you know, bless the Germans, you know.
But we ball up our science, and our good sense we kink,
When we try German methods, you know.

MISCELLANEOUS.

Webster (D.) On a New Method of Treating Episcleritis.— From the history of three patients of this malady it is evident that the actual cautery should be tried further as a useful remedy against this very chronic and intractable complaint. In all of the three patients referred to the disease was curtailed to a few weeks from its usual duration of months and, in some instances, years. Sweatings induced by salicylate of soda potations and hypodermic injections of pilocarpine have been the methods that have given any aid, and that small and unreliable, heretofore. The platinum cautery is applied at a red heat generously over the peculiar diagnostic swellings, in some cases repeating the application in the course of a week. Cocaine is instilled before the use of the cautery.—*International Jour. of Surg. and Antisept's*, Jan., 1888. A. T. M.

Wendt (E. C.) on Recent Views Regarding the Pathology and Treatment of Pertussis.—The author concludes that there is constantly associated with whooping-cough a special microörganism, discovered by Afanasieff. This microbe is a small bacillus, having properties that distinguish it from all other known bacteria. The "bacillus pertussis" (*bacillus tussis convulsivæ Afanasieff*) can be readily demonstrated in the sputum of patients having the disease. While its etiological significance appears established, it does not possess much diagnostic importance, since it is found only after the clinical features of the disease are already well marked. The treatment of pertussis has not yet been materially advanced by this discovery. Antiseptics locally applied do not appear to shorten the duration of the disease. Hygiene and judicious alimentation are, in the present state of our knowledge, of at least equal importance with medical treatment. Antipyrin and the bromides are reliable symptomatic drugs, and are devoid of danger. A specific has not yet been found. Abortive forms of pertussis may occur, but no plan of treatment now known can claim to have abortive efficacy.—*Medical News*, June 2, 1888.

Wilkins (W. F.) on Separation of the Vertebræ with Protrusion of Hernia between the Same; Operation; Cure.—A young woman in the eighth month of gestation, received a severe contusion of the abdomen. Pains came on the following day, and she was delivered of a male child with a peculiar swelling in the back at the junction of the dorsal and lumbar spine. This protrusion on the sixth day was purple and about the size of a goose egg.

The following day, under an anæsthetic, an incision four inches in length revealed a separation of the vertebræ to the extent of a half inch. Through this opening protruded the hernia and its contents. The spinal cord and its contents had been pushed to one side. The hernia was reduced without opening the sac. The vertebræ were kept in place by several turns of silver wire passed through the intervertebral notches of the adjacent dorsal and lumbar vertebræ. The external wound was closed by catgut sutures, the whole dusted with iodoform, and the dressing finished with a broad rubber bandage. The patient was practically well in six days.—*St. Louis Med. and Surg. Jour.*, June, 1888.

Reece (M.) on Treatment of Wounds of the Palmar Arch with Shot-Bag Pressure.—Mrs. H. cut the superficial palmar arch of the left hand, on the radial side, while opening a can of fruit. The bleeding was considerable, and was arrested for a time with compression applied by the husband. The next day the hemorrhage recurred to such an extent that a physician was called. The bleeding was again arrested with pressure, but as it was badly borne it was relaxed, and during the night profuse and exhausting hemorrhage took place. By this time considera-

ble swelling and infiltration of the tissues of the hand and wrist had also taken place, and the attending physician, believing it necessary to tie the arteries at the wrist, I was sent for in consultation.

Upon arriving at the patient's home, I found the doctor had remained all night, for the reason that the amount of pressure applied caused so much pain that it had to be frequently removed, and then the bleeding would begin immediately. The patient was a spare woman, anæmic, and very nervous.

A small bag, four inches in length and two and a quarter inches in width, was made and filled with bird-shot. The fore-arm was placed on an elevated pillow, and the shot-bag placed lengthwise on the wrist over the arteries. The pressure was well borne, giving no pain or uneasiness. The wound began to heal rapidly, and in four days the weight was removed, and no tendency of the bleeding to again show itself was manifested.—*Med. and Surgical Reporter*, June 23, 1888.

Langlois and Richet (Ch.) on the Influence of the Temperature of the Body upon the Convulsant Action of Cocaine.—It has been discovered by these physiologists that cocaine in equal doses produces convulsions which are more intense as the animal is subjected to a higher temperature.

If a dog in a bath at 104°–106° be given gr. ½ of cocaine convulsions ensue at once, but if the same animal the next day be chilled by a bath at 87°, gr. ⅛ of cocaine produces no convulsion, while, if the bath be raised to 102° without making a new injection, very violent convulsions appear. It is also noticed that the convulsions themselves raise the temperature. Of course, unless this vicious circle is broken, the animal perishes by failure of the heart and respiration. Refrigeration thus appears to be the best way to combat this toxic action of the drug.—*L' Union Méd.*, June 9, 1888.

Ballet (G.) on Epilepsy from Worms.—A girl of 11 had four epileptiform attacks in five days. It was discovered that the child had lumbricoid worms, and a vermifuge caused their discharge and a cessation of the attacks. The patient remained perfectly well until the age of twenty, when after a severe fright she had another regular epileptic attack. She had no hereditary tendency to epilepsy, but showed a personal predisposition to the disease.—*La France Méd.*, Feb. 21, 1888.

PUBLISHER'S NOTES.

The Treatment of Ulcers.—An article appeared in the *London Medical Record*, for December 15, 1887, giving interesting details of the treatment of ulcers by phosphoric acid, as shown by the experience of Dr. Grossich. By his method of treatment, he used a ten per cent. solution of pure phosphoric acid in distilled water. The ulcer is covered with a bit of lint dipped in this solution, and the dressing renewed three or four times a day. The patient for the first few minutes feels a slight burning sensation, but this soon passes, and within twenty-four or thirty-six hours, the ulcer cleans, and looks better. Inflammation or eczema of the surrounding parts disappears, and all pruritus ceases. The ulcer cicatrizes rapidly, and the cicatrix is firm and healthy.

Kollischer treated tubercular affections of the joints with injections of the phosphate of lime, with great success. Dr. Grossich has also had good results with this treatment, and cites some very interesting successful cases.

The treatment by the solution of phosphoric acid was further employed in a case of tuberculous abscess of eight months' duration, and also a case of eczema marginatum which had lasted more than a year, and good results followed.

The above suggests the superiority of Horsford's Acid Phosphate as a substitute for the phosphoric acid.

The effective acidity of this preparation is about the same as the ten per cent. solution of phosphoric acid which is prescribed in the above treatment, and it may therefore be justifiably employed by the profession in the treatment of disorders of this character. It has the advantage of containing the phosphates in solution, notably the phosphate of lime. It follows, then, that all cases that require the phosphoric acid treatment can be more advantageously treated by Horsford's Acid Phosphate, and the suggestion is hereby commended to the profession.

Papine.—In all cases where morphine is indicated Papine will do the work without the disagreeable effects of morphine or opium on the stomach and bowels. I shall continue to use it in my practice. J. M. MOSENA, M. D.
Salmon City, Idaho.

McArthur's Syrup.—The McArthur Hypophosphite Co., Boston, Mass., will send to any physician who mentions THE MEDICAL ANALECTIC, their valuable pamphlet on the "Curability and Treatment of Consumption," free. They will also send a bottle of their Syrup without charge except the expressage. This is a splendid chance to test this palatable and meritorious article.

Habitual Abortion. — Aletris Cordial (Rio) works admirably in threatening abortion. I have seen cases that went full term for the first time in several years. I believe it to be the best uterine tonic. S. E. MORGAN, M. D.
Trufant, Mich.

Bromidia (Battle) has afforded me nights of good sleep, when morphine no longer acted except in deleterious doses. DR. GIVIEN.
Montpazier (Dordogne), France.

Lactopeptine.—You can procure a sample of this well known and reliable digestive agent, by writing to N. Y. Pharmacal Association, Box 1574. N. Y. City.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital. CONDICT W. CUTLER, M.D., Instructor in Diseases of the Skin, Post-Graduate Medical School, New York.

VOL. V., NO. 28. July 12, 1888. WHOLE NO. 76.

CONTENTS.

	PAGE
Occasional Report on Dermatology	329
Therapeutics	332
Pathology	235
Miscellaneous	340

OCCASIONAL REPORT ON DERMATOLOGY.

BY CONDICT W. CUTLER, M.D.

Leprosy.[1]—Leprosy is an endemic disease, probably due to a specific bacillus, and contagious only by inoculation, like syphilis.

The disease is practically limited to people living upon fish diet *along the seacoast.* The disease is remarkable; the average life of the leper after the full development of the disease is from ten to fifteen years. The period of incubation is *usually* less than one year. Hereditary leprosy does not develop until the age of puberty is reached, unless there is some exciting cause, as an inflammatory skin disease.

As to the spread of leprosy, *The British Medical Journal* of November 12, 1887, says, that the greatest difficulty in estimating the contagiousness of leprosy lies in the unexampled length of the period of incubation. Ten or even twenty years may elapse from the time of contact until the development of the disease. As an example of the long period of incubation, Dr. Hillibrand gives a case from Borneo. A boy thrust a knife into an anæsthetic part of the body of a leprous child, and then thrust the knife into his own thigh. He had no further dealings with lepers, but nineteen years afterward developed leprosy.

Dr. H. G. McGrew,[2] in commenting on leprosy in the Hawaiian Islands, says that its contagiousness is upheld by every physician in the Hawaiian Islands, but many persons have an immunity from the disease conferred upon them; the disease is hereditary, but sterility is more frequent among lepers than fertility; the majority of the offspring of leprous parents are still born or die soon after birth; many children of known lepers do not develop the disease; that the disease is not curable, but that medicines and hygiene will ameliorate the symptoms for a time.

The treatment of leprosy, acording to Dr. J. H. Dunn,[3] is largely hygienic. Internally the balsams and oil have yielded the best results, especially gurjun balsam and chaulmoogra oil in one to five-drachm doses daily.

The local applications yielding the best results are chaulmoogra oil, chrysarobin, and pyrogallol. Unna, of Hamburg, employs the following ointment.

℞	Chrysarobin	5.
	Salicylic acid	2.
	Ointment	100.

Haviland (A.) on the Geographical Distribution of Cancerous Disease.—There is abundant evidence to show that cancer does not thrive in high, dry localities, where the soil is kept sweet by the absence of floods and the nature of the rocks; but that it does prevail and become very fatal where vegetation is killed and decomposed, and where afterward a rank herbage springs up, composed of sour grass and bitter plants, which scour and otherwise disease cattle and sheep that feed upon them.—*The Lancet*, March 10, 1888.

Hutchinson (J.) on Lupus Necrogenicus.—Tubercle bacilli are found in great

[1] R. H. J. Perry: *The Medical Register*, January 14, 1888.

[2] *American Lancet*, May, 1888.

[3] *Northwestern Lancet*, March 1, 1888.

numbers in the granulation growth attending this disease. They are found more easily than in sections of common lupus, and this is the only form of lupus in which contagion seems at all probable. It usually has its beginning from dissection pricks, and, strange to say, it shows the least tendency to spread. It rarely produces satellites, and is never followed by patches on other parts of the body, or by any thing indicating visceral tuberculosis.

It sometime lasts forty years without doing any harm.—*Brit. Med. Jour.*, Jan. 21, 1888.

Influence of Erysipelas in Lupus.—There is a popular idea that an attack of erysipelas is beneficial to lupus (*Monatshefte für praktische Dermatologie*), but the observations of Umternitz of Prague are conclusive in dispelling this. In three cases erysipelas attacked areas affected with lupus, with at first some transitory improvement, but afterward the lupus patches became larger, and the process aggravated. The conclusion is reached that all inflammations in the neighborhood of lupus tissue, if not of sufficient intensity to remove all the disease, aggravate it, diminishing the vitality of the tissues.—*Edinburgh Med. Jour*, April 28, 1888.

Rohe (G. P.) on Elephantiasis Arabum.—Dr. P. Manson of China has found an animal parasite, the *filaria sanguinis hominis*, in the blood- and lymph-vessels of those suffering from endemic elephantiasis, and concludes the inflammatory obstruction of these vessels and glands is the direct result of it, as well as other allied diseases; lymph-scrotum, and chyluria.

Outside the endemic elephantiasis the disease is the result of irritative inflammation in the lymphatics, and not the result of parasitic embolisms. This would explain why the disease often follows an attack of erysipelas. — *Maryland Med. Jour.*, Dec. 31, 1887.

Shoemaker (J. V.) on the Cause of Infantile Eczema.—Insufficient and improper food is the most frequent cause of eczema in children.

Mothers' milk altered in character by pregnancy or menstruation, or cows' milk diluted too much with water, most frequently produce eczema. If the food is good, imperfect assimilation by lowering the tone of the nervous system frequently causes eczema. Deficient excretion, especially of the bowels, often produces it, and when present the cases are stubborn until the normal functions of the excretory organs are re-established. External irritation is a frequent source, especially from dyed clothing, wet diapers, too frequent washing with soap, and the application of quack preparations to the skin.—*Canada Medical Record*, Feb., 1888.

Bryce (P. H.) on Eczema.—The treatment of *infantile eczema* with iodide of potash has yielded excellent results when most other remedies have failed. This action is explained by considering the condition of the skin causing eczema. In healthy skin the transfusion and absorption by the blood-vessels and lymphatics counterbalance each other, but in eczema this balance is disturbed either by excessive transfusion or deficient absorption.

The iodide by stimulating absorption and lessening arterial pressure thus removes obstructions and cures the eczema. —*Medical Science*, May, 1888.

Morison (R. B.) on the Treatment of Eczema.—In the treatment of eczema water is one of the most useful internal remedies. A gallon or more should be taken daily to show any decided benefit. The diet should be principally oil, fats, and vegetables with a small amount of meat, but no sugar or sweets of any kind.—*Maryland Medical Journal.*

Raymond (P.) on Urticaria Pigmentosa.—This affection is characterized by urticarial eruptions succeeded by raised or flat patches of a brownish color. Its duration averages about ten years, and it is allied to urticaria, but differs from it clinically and pathologically.

It is a special angio-neurosis marked by a vaso-motor hyper-excitability and an independent dystrophy or tropho-neurosis of the derma ending in the formation of peculiar cells called "mastzellen."

The pigmentation is due to these cells, hæmatin crystals, and pigmentation of the deeper epidermal cells.—*London Lancet*, March 3, 1888.

Wilson (J. C.) on Herpes Zoster.—Herpes zoster is usually regarded as a mere epiphenomenon of a neuralgic attack, but in certain clinical respects it differs essentially from ordinary neuralgia of the intercostal nerves.

Neuralgia is a recurrent disease, herpes zoster is not. Relapses are common in the former, rare in the latter.

Neuralgias in one part of the body are apt to be followed by neuralgias in other portions, which is not so with herpes zoster.

In intercostal neuralgia no change is ever found in the ganglia on the posterior nerve roots, while in herpes zoster changes are usually found in the nerve ganglia corresponding to the distribution of the rash.—*The College and Clinical Record*, March, 1888.

Is Herpes Zoster an Infectious Disease?—An epidemic of herpes zoster in Thuringia has led many German physicians to consider the disease due to a specific germ. Dr. Pfeiffer examined six cases in Weimer, and found a microscopic parasite present in each case.

They resembled the sporulation of variola and vaccinia, beginning with an amœboid stage, followed by encysting, and concluding with the liberation of a large number of spores.

Inoculations have been followed by negative results.—*Deutsche Medizinal Zeitung*, Feb, 1888.

Reynolds (H. J.) on Acne.—The most active cause in the production of acne in young women is the disturbance in the equilibrium of the nervous system at the time of puberty—the age at which the maturing of the reproductive organs is completed. This may be an active cause also in the male, but much more important is that physiological phenomenon—the growth of the beard. As the sebaceous glands lie in contact with the hair follicles, the development of the latter naturally implies physiological activity in the former, and their normal function therefore becomes very readily impaired, and acne results.—*The Medical and Surgical Reporter*, Dec. 24, 1887.

Reynolds (H. J.) on Lichen Ruber Planus.—The only diseases for which lichen ruber might be mistaken are papular eczema, papular syphiloderm, and psoriasis. A mistake of this kind is not liable to occur when we consider that the papules of lichen ruber are flattened, rise abruptly from the surrounding skin, are often umbilicated, are angular in outline, are always dry but slightly scaly, the location about the ankles and wrists, are pale red in color, and when uniting to form patches their individuality usually remains distinct.—*The Medical Register*, Oct. 22, 1887.

Greenough (F. B.) on Pediculosis.—Boston reports more cases of pediculosis in proportion to the total number of skin affections than any other city in the United States; Philadelphia stands second, and New York third.

Out of 500 cases of pediculosis capillitii reporting at the Boston Dispensary, 419 occurred in females, and mostly between the ages of 5 and 10 years.

In 337 cases of pediculosis corporis, 196 occurred in males, and mostly in persons over 50 years of age.

In 27 cases of pediculosis pubis, 26 occurred in the male, and more than half between the ages of 15 and 25 years.—*Boston Med. and Surg. Jour.*, Nov. 17, 1887.

Corleth (W. T.) on the Study of So-Called Prairie or Lumberman's Itch.—The disease differs from ordinary itch in several diagnostic points.

Microscopists have not found the *acarus* present, but have ascribed its contagious nature to an hitherto unlabelled parasite.

Although the disease clinically looks like scabies, it does not yield to the therapeutical measures best suited to that disease. In the winter of 1885 one person in every twenty in Louisville had this disease.—*Cincinnati Lancet-Clinic*, May 9, 1888.

Miller (A. C.) on Pemphigus.—During the stage of development and desiccation of pemphigus the best local treatment consists in dusting the lesions with zinc and bismuth. Subsequently after the crusts have fallen off the itching is most readily subdued by the application of Goulard's lotion. With regard to internal treatment, during the acute stage quinine acts both as an antipyretic and tonic, but after the febrile stage of the eruption has disappeared arsenic will cause a steady and rapid improvement.—*Edinburg Medical Journal*, Jan., 1888.

Montgomery (D. N.) on Trichorexis Nodosa.—The diseased hairs are stubby short and have an appearance of being singed. At intervals on the hairs there are whitish specks, looking like the nits of some insect, giving the hairs a dirty look. On microscopical examination these spots are seen to be caused by the breaking up of the hairs into fibrils, looking as if the bushy extremities of two brushes were placed in apposition. The immediate cause of this splitting seems to be the swelling of the medullary substance of the hair and supposed by *Bergel* to be formation of gas in the medulla. Shaving will cure the affection.—*Pacific Med. and Surg. Jour.*, Nov., 1887.

THERAPEUTICS.

Johnston (D.) on Bloodletting in Pneumonia.—Very many—I am safe to say a large proportion—of those gentlemen who have commenced practice within the last twenty years entertain an exaggerated and mistaken estimate of the effects of bloodletting on the system. Not many of these have seen the beneficial result accruing from the removal of twelve or fifteen ounces of blood from the arm of a robust patient, either male or female, in an upright position, while suffering from a severe attack of pneumonia; and fewer still have themselves performed the trifling operation of venesection. Various reasons are advanced for this change in the treatment of pneumonia and other inflammatory affections. Change of type in disease owing to a more asthenic tone of system, and change in fashion, are the principal. With regard to an alteration in type and change in the system, it may be remarked that evidence is wanting to show that bloodletting in the puerperal female is more fatal now than ever it was, or that patients succumb more readily to profuse hemorrhage the result of accident or surgical operation. Probably the change of fashion, in so far as the giving of drugs and the abstraction of blood are concerned, is the result of the teaching of homœopathy in a large measure, and is one of the few lessons taught by this system meriting gratitude. To show the harmless, even if not curative, effect of profuse bloodletting as carried out half a century ago, and how innocuous to the patient even when pushed to an extreme length, a case or two may be adduced taken from periodicals of that period.

In the *Edinburgh Medical and Surgical Journal* for 1836, in Dr. Craigie's report of cases of fever treated in the Royal Infirmary, is narrated the case of James F——, aged twenty-four. He was admitted on August 27th in such a state of delirium and excitement that it was necessary to place him under restraint. On September 9th he left the hospital "quite well, but rather weak." During this patient's illness he was bled on four occasions to the extent of sixty-two ounces, and had forty-four leeches applied to his temples.

In the *Medical Gazette* for September, 1839, is reported a lecture by Mr. (now Sir) Rutherford Alcock. In it we find the case of George P——, the recipient of a gunshot wound on the thorax. After detention in a military hospital for seventy-eight days he was discharged cured. On admission this patient had hemorrhage, checked by a full bleeding, and during the two following days he lost thirty-three ounces of blood from the arm, had thirty leeches applied, and was also cupped.

Once more the practice in regard to bloodletting across the Channel may be noticed. In the issue of the *Gazette* already quoted, in a lecture on inflammatory affections of the cornea, Velpeau says: "If the patient is young, robust, and of a plethoric habit of body, I bleed copiously, to the extent of eighteen or twenty ounces, and repeat the bleeding next day; sometimes also the third day."

I myself have bled patients suffering from pneumonia in 1836; I have also performed the same operation under like circumstances in 1887. In most instances the relief from pain was almost immediate, and the period of convalescence short. Venesection has not been confined to the treatment of pneumonia, but has been practised in inflammations of the serous membranes, with similar results. Of course such a line of treatment has not been pursued without discrimination, due regard having always been had to the condition of the patient.

Were statistics to be called into court to help to decide the relative mortality under the two systems of treatment, it would only be fair to take into consideration the fact that the stethoscope had not fifty years ago enabled the practitioner to make the exact diagnosis in lung disease he can do now; and it is not unreasonable to assume that cases, more or less numerous, were believed to be pure inflammations, when a more accurate diagnosis would have revealed the fact that the disease was engrafted on a tubercular lung, or some other condition of pulmonary mischief. Many other ailments besides those alluded to have been used, and might be now, alleviated or cured by the judicious and moderate abstraction of blood; notably those caused by uræmic poisoning.

Those who advocate abstention from bloodletting in such cases assert that, although you remove a quantity of impure blood, that which is left is equally poisonous. No doubt this is true, but it is equally a fact that, if in a twelve-ounce bottle of liquid of any kind you have an

ounce of laudanum, you will only have half an ounce if you pour out a half—a quantity less deleterious absolutely, though not relatively.

Such statements and the clinical history of cases resembling those narrated might surely remove in a large measure the fear of bloodletting in pneumonia and many other diseases, which amounts to what may be well termed hæmatophobia. I do not suggest that the "letting of blood" should be carried to the extent it formerly was in the treatment of disease, but I think that this remedy—powerful for evil, no doubt, as well as for good—ought not to be, as for many years it has been, almost relegated to undeserved oblivion.—*Lancet*, June 23, 1888.

Harlan (H.) on Eserine in Corneal Ulcers.—Of eighteen cases thus treated ten were surely and positively benefited, being under observation several days. Seven were seen but once, and from this fact it is a fair presumption that most of them required no further treatment.

One case only did not seem to be benefited. This patient was under observation for seventeen days, and during this time various remedies were used without avail. On his last visit he was directed to return to the use of the eserine. His case was not from injury by oyster-shell.

In the use of eserine two cautions are to be observed: First, the solutions should not be too strong. With many patients a solution stronger than gr. j. to ʒ j. gives a great deal of pain. In the second place one should be very sure that the case you are treating is not complicated by iritis.—*Med. Record*, June 23, 1888.

Byrd (A. H.) on Veratrum Viride. It is in chronic blood diseases where veratrum viride wields its most beneficent influence as a remedy. Among these, syphilis offers a broad field for its action. If the disease is in its incipiency I usually give hyd. chlor. mite in one or two-grain doses for about a week, and then stop it. I next order the patient to take Norwood's tincture veratrum viride, five drops *ter die*, immediately after eating, in water, for one week, when the night dose is increased one drop every night until the dose of ten drops is reached. I then keep the patient taking five drops after breakfast and dinner, and ten drops after supper, until the disease is expelled from the system. As adjuvants in the treatment I order the bowels to be kept open with saline aperients, the skin to be kept acting by a daily bath, and if there are chancres I either use iodoform liniment or calomel and iodoform powders in equal parts, applied three times per day. The use of alcoholic stimulants is strictly interdicted. In scrofulosis the drug is equally as efficacious. The treatment is about the same as in syphilis, except that there is no mercury used, and a good emulsion of cod-liver oil is employed and given with the veratrum. All glandular enlargements in scrofula, and buboes in syphilis are rapidly absorbed, and syphilitic laryngitis quickly relieved by veratrum. Syphilitic ophthalmia also shows its virtues by the rapid reduction and extinction of all inflammatory action, so soon as the system gets well under the alterative influence of the remedy.

The efficacy of veratrum in puerperal fever has, in recent years, been brought to the notice of the profession. I will add here, however, that the reflex influence upon the brain and the detergent effect upon the circulatory system, of croton oil, administered in two-drop doses until the bowels respond well to its action, greatly assists veratrum in controlling puerperal convulsions.—*Med. and Surg. Reporter*, June 23, 1888.

Gramshaw (F. S.) on Carbolic Acid in the Successful Treatment of Enteric Fever.—The patient is of course confined to bed, in a well-ventilated room if possible, and every effort is made to ensure that no particle of solid food of any kind is administered by over-anxious relatives. The diet is restricted to milk, toast-and-water, barley-water, and calf's-foot jelly; new milk is always insisted upon as the main support, from a quart to three pints being given to an adult in the twenty-four hours. The carbolic acid is ordered in a mixture, of which this is the prescription: Take of carbolic acid (Calvert's extra pure for internal administration), twelve minims; tincture of iodine (B. P.), sixteen minims; tincture of orange-peel, one drachm and a half; simple syrup, three drachms; water to eight ounces: the dose to be an ounce every four hours for the first fortnight, or until the urgent symptoms yield, when the same dose is administered three times a day. The good effect is manifested almost immediately. In two days the pulse shows and gains in strength, the temperature falls, the tongue becomes

moist, all diarrhœa ceases, and the general condition of the patient is so much improved that, as a rule, in a week all anxiety is at an end, and the case progresses quietly towards recovery. It sometimes happens that a case is cut short by this treatment as suddenly as is a case of acute rheumatism by the exhibition of salicylate of soda; but more generally the fever runs its course of thirty days before all danger of relapse is past, and I have found it better to continue the medicine until the thermometer shows no rise of temperature for three or four clear days. If the pulse at any time rises above 120, the temperature 105°, or if sordes form on the lips or teeth, either champagne or brandy, and sometimes both, are given every two hours. This, however, is rarely necessary. Complete abstinence from any kind of solid food until all traces of fever have disappeared is insisted upon, and when the patient does return to his ordinary diet, the resumption of solids is a gradual progress from soup to boiled sole, chicken, mutton, and soft vegetables. Beef-tea is carefully avoided so long as the temperature is abnormal, as it so frequently gives rise to troublesome diarrhœa. The carbolic acid combination is usually taken without trouble or difficulty. A day or two after commencing with it patients always complain that every thing they take tastes of the medicine; this is unavoidable, and need give no anxiety, unless vomiting is excited, when it is a good plan to reduce the dose of carbolic acid and to add a small quantity of dilute nitro-hydrochloric acid. It is easy to detect the smell of carbolic acid in the breath and perspiration, but I have rarely noticed carboluria. It must also be noted that not only does diarrhœa cease, but the opposite condition—namely, obstinate constipation—is generally induced. Aperients are decidedly to be avoided; if the bowels do not act for some days, I administer an enema of warm soap-and-water, or of a small quantity of castor oil emulsified in warm water with the yolk of an egg. If after convalescence there is trouble in getting a regular evacuation, I give daily small doses of belladonna and salad oil.

I do not think the remedy owes its antipyretic action to a direct influence on the vascular activity through stimulation of the vagus or the cardiac ganglia, but I lean to Dr. Rothe's alternative opinion that this undoubted action is the result of the causes being gradually overcome and removed. I cannot prove that the presence of carbolic acid in the system either arrests the production or destroys the already produced typhoid bacilli, but I firmly believe this to be the case. I also consider that the ulceration in the intestine is prevented, and ulcers already formed are induced to heal rapidly. No other remedies have in my experience proved reliable. I give stimulants without hesitation if necessary, and to assist recovery when a tonic is needed I prescribe bark and mineral acids.

In my note-book I have a rough analysis of one hundred and sixteen cases. Seventeen were children, ten adolescents, and the remaining eighty-nine adults, the sexes of the total number being about equally divided. They belonged to all ranks of life, and the surroundings of some of the poorer cases were not conducive to cleanliness or the possibility of good sanitary arrangements. *The result in every case but one has been complete recovery*, and that one fatal case calls for the explanation that death did not take place until long after the fever was over, and from quite an accidental and adventitious cause. This case is as follows:

J. N——, aged twenty-eight, a badly-fed farm laborer, fell ill in September, 1882, and was carried safely through a smart attack of enteric fever by a strict adherence to the line of treatment indicated in this paper. Calling to see him one morning about four weeks from the commencement of his illness, the thermometer showed a temperature of 104°. This astonished me, as at my last visit a day or two previously it had fallen to the normal figure. On making examination I found under each arm a large axillary abscess. A few days afterwards I incised them both and they rapidly got well, though of course the patient was thrown back and weakened by this fresh drain on his vital resources. A fortnight after his recovery—that is, eight weeks from the typhoid invasion—his wife took the opportunity of a bright, breezy day at the end of October to scrub and clean the room they inhabited together. She conducted this operation with most praiseworthy assiduity, keeping both door and window wide open, her husband sitting on a chair in a direct line between them, surrounded by a sea of soapsuds. She did not neglect to scrub the floor under the bed, and seemed surprised at the reproof I ad-

ministered when, on calling, I became an eye-witness to the above facts. Next day the poor fellow had a succession of rigors, and succumbed three days after to an attack of acute double pneumonia.—*Lancet*, June 23, 1888.

A Disinfectant of Air.—According to M. Keldyche, who has just published the results of a series of experiments on the air drawn from his hospital wards, air which has been saturated with eucalyptol will no longer give rise to colonies of bacilli in gelatine. The spores of fungi are able to pass unharmed, but as their action on the higher animals is probably limited, it is not a matter of much importance. If confirmed by independent observation, this valuable quality renders the drug worthy of widespread employment, for no other disinfectant is known which can be relied upon to effect its purpose without rendering the air irrespirable, besides acting very injuriously on furniture, clothing, etc.—*Med. Press*, May 23, 1888.

Still a New Anæsthetic.—Dr. Pliouchkine, in the *Revue de Thérapeutique Médico-chirurgicale*, April 15th, recommends canadol, a hydrocarburet distilled from American naphtha, as a local anæsthetic. It is a transparent liquid, very volatile and smelling like benzine ; it is insoluble in water and in alcohol, which renders it superior to ether. It causes rapid cold in the first minute, like ether, but does not, like this substance, continue to lower the temperature in the ensuing minutes. The anæsthesia produced by canadol is complete in sixty seconds, and employed as an anæsthetic in cases of minor operations completely subdues all pain.—*Brit. Med. Jour.*, June 2, 1888.

PATHOLOGY.

Moure on Hard Chancre of the Ala Nasi.—A patient consulted the author, because of a difficulty of breathing through the right nostril. There was considerable redness of the skin on the right ala, which was unusually prominent. Internally was seen a fungous mass, reddish in spots, grayish in others where it was covered by pultaceous mucus. At some points the growth was soft and bled upon being touched ; at other points it was hard. The other nostril was healthy. The right sub-maxillary glands were swollen.

Mixed treatment was instituted and local applications of a solution of resorcin. Eight days after the sore was first seen by the author a roseola appeared, and about the same time mucous patches were discovered. All symptoms disappeared under appropriate treatment.—*Annales de la Soc. Méd-Chir. de Liége*, May 1, 1888.

Michaux (J.) on a Case of Syphilis with Peculiar Complications.—Mr. B., æt. forty-two, contracted syphilis in October last, his case presenting the characteristic initial chancre near the frænum. In about one month this sore healed under the usual treatment. About this time a chancroid appeared on the dorsum, under the prepuce just behind the corona. This sore gave no great trouble for two or three months, during which the secondary symptoms developed fully. About this time it became phagedenic, and slowly went down to the meatus and involved the prepuce. Various local remedies were used along with the constitutional mercurial treatment, and after great difficulty and much time it began to granulate and heal, and is now nearly well. About the time of the greatest activity of the secondary symptoms, and when fully under the influence of mercury, an attack of acute articular rheumatism supervened with great violence in the right knee-joint. Salicylate of soda controlled it, and in about ten days the patient was able to walk.—*Va. Med. Mo.*, June, 1888.

Charbon in a Pregnant Woman Followed by Fatal Infection of the Child.—A case of considerable interest is recorded in Virchow's *Archives*, Bd. 109, in which a woman, æt. thirty-two, in her second labor, succumbed from collapse shortly after the birth of the child. The labor ran a normal course. At the post-mortem, œdematous infiltration of the mesentery and retro-peritoneal tissue was found—blood-stained pus filled all the large lymphatic vessels and the thoracic duct ; an extravasation of chyle had taken place into the peritoneal cavity, and the mesenteric glands were deeply congested. On microscopical examination large numbers of bacteria of charbon was found in the lymph and chyle, and also, but to a much less extent, in the blood. The patient had been engaged during life in handling horse-hair, and was thus exposed to charbon infection. It is, perhaps, probable that the disease in this case had been derived from spores, but the wo-

man had ceased to work at the occupation during the last three months of her pregnancy. The child died on the fourth day with bluish patches on various parts of the body. Microscopic examination revealed bacteria in the blood, especially in that which was taken from the right lung. The author considered that it was mainly by the blood that the infection became active, and he believed that, in this instance, at the moment of the detachment of the placenta, some microbes from the blood-vessels found their way into the circulation of the fœtus. —*Med Press*, June 6, 1888.

Hemoptysis Following Coition.—An anonymous writer narrates the case of a woman, who is consumptive, but now the lung seems to have healed to a certain extent. She is not annoyed, as a general rule, with cough or indisposition of any kind. About twice a week, lately, she has had hemorrhages from her lungs. It was found that the hemorrhage only came after sexual intercourse, sometimes immediately after the act is finished.

This woman is in almost perfect health, and forgets that she ever had pulmonary disease, she is troubled so little with any of the usual symptoms.—*Med. Times*, June 18, 1888.

Joal on Genital Epistaxis.—The author proposes to divide cases of epistaxis into four groups: traumatic and from ulcers, dyscrasic, mechanical, and vasomotor.

The latter group comprises the form of epistaxis usually termed essential, idiopathic, or spontaneous.

By a reflex action of local or remote origin, the erectile tissue becomes turgid, and if the blood pressure becomes too great and passes the bounds of the elasticity of the dilated capillaries which make up the cavernous tissue, the blood-vessels first and the mucous membrane next give way and epistaxis occurs. The erectile tissue in question is capable of swelling up on the slightest irritation of the nasal mucous membrane, skin or eye, or even after some psychic phenomena. The most frequent cause of epistaxis at the age of puberty is physiological or pathological irritation of the sexual organs. There seem to exist the closest relations between the nose and the reproductive apparatus, as an instance of which the author cites the well known influence of odors, in man and animals upon the genital functions. According to him, turgescence of the erectile tissue of the turbinated bones occurs during copulation and menstrual congestion, giving rise to catamenial and copulative epistaxis. He cites cases of occasional epistaxis due to masturbation.—*Rev. Mens. de Laryngologie*, etc., March 1, 1888.

Luc on Tracheal Ozæna.—According to the author, there exists a sort of tracheitis, sometimes occurring with, but also independent of, nasal ozæna, which is characterized by fœtid secretions which contain a micro-organism similar to that observed in the crusts of nasal ozæna. This the author calls tracheal ozæna. The crusts observed on the walls of the trachea are developed *in situ*, and when removed are reproduced. There is a morning expectoration of a greenish, viscous, thick sputum exhaling the peculiar fœtid odor of ozæna. The laryngoscope reveals, upon the tracheal walls, the presence of the characteristic crusts. Sometimes the larynx itself becomes affected. Inhalation of vapors and atomized liquids causes the crusts to become dislodged, but they quickly reform the moment local applications are suspended.

In one case reported by the author, post-nasal syringing, inhalations of pulverized thymol, and intra-tracheal insufflations of powdered iodoform caused very decided improvement.—*L' Union Méd.*, March 10, 1888.

Vanheuverswyn and Ballenghien on Suppurative Psoitis, Invasion of the Ischio-Rectal Fossa and Hip-Joint by Pus; Death.[1]—A man of twenty-three entered the hospital as a case rheumatism. For fifteen days he had complained of a violent pain in the adductor region of the right thigh, which was aggravated by pressure, and obliged him to hold the limb abducted and rotated outwards. Movements at the hip and knee were not painful. There was fever (100°–103°). Constipation was relieved by a saline purge, and defecation was painless. Ten days later, the pain was in the groin, but it disappeared. Two days later, there was much pain in the right perineal region, which seemed hard and swollen, though no fluctuation could be obtained. For a few days defecation had become painful. Examination by the rectum showed that this swelling encroached upon the calibre of the gut, and pressure upon it in this location

[1] See MEDICAL ANALECTIC, 1888, p. 189.

was extremely painful. The glands in the right groin were swollen and tender as were those in each axilla. The muscles of the arms and forearms were very painful, both spontaneously and upon pressure, while movements of the joints were not painful.

The perineal swelling was opened, and a pint of pus was evacuated. A large diverticulum, extending off into the ischio-rectal fossa, was found, and through drainage was established by a counter-opening. The course of the disease was not much modified, and a few days later there came on violent pains about the hip-joint aggravated by motion. The existence of crepitation left no doubt about the diagnosis, and the head of the femur was exsected, and the cotyloid cavity drained. Death occurred on the fifty-second day of the disease. On autopsy there were found metastatic abscesses in the lungs and purulent foci in the forearms. The right psoas was completely destroyed by suppuration, its sac being filled with pus even down to the small trochanter. Among the adductors was a second purulent focus, and in the pelvis, about the obturator foramen and alongside of the ischium, which was superficially necrosed, was a third collection of pus, which connected with the other two.—*Jour. des Sci. Méd. de Lille*, May 25, 1888.

Cheever (D. W.) on the Subsidence of Doubtful Tumors under the Use of Alterative Medicine.[1]—Cases of tumor are frequent where an operation is not indicated, either on account of poor health, or age, or of the extent of the disease.

The eleven cases which I shall briefly detail were all in patients of middle age, or older.

Case I. An elderly lady of spare habit. Came from the western part of the State. She had had a small hard nodule near the nipple for some months. She came to me to have it removed; but when she arrived I found her almost demented from the use of large doses of bromide of potash. Her memory and mind were confused, and she was quite feeble physically. The medicine was discontinued, and she soon began to improve. Meanwhile the tumor had diminished and nearly disappeared, and no subsequent operation was required.

Case II. Mrs. ———, aged forty-two, florid and strong, was much disturbed mentally on discovering a lump in the breast. It was oval, movable, nearly, painless, and about as large as an English walnut. It became tender, and apparently enlarged at her menstrual periods. The diagnosis of probable adenoma was made, and an operation was discouraged. The iodides of potash, of iron, and bromide of potash were taken for four months, and the lump slowly disappeared. The following year a lump quite similar to the other appeared, and she was encouraged to pursue the same treatment, and a disappearance slowly took place. Several years have elapsed, and she remains well. When she first sought my advice she was expecting an immediate operation.

Case III. Mrs. ———, aged sixty. Was operated on by excising the mamma for a small scirrhus tumor. After two years and a half of exemption, recurrence of an indurated lump in the cicatrix took place. She was put on the use of arsenic and iron for six months. At the end of that time she writes me that the disease makes no progress, and she continues the treatment.

Case IV. A middle-aged man from the provinces has a large mass of lobulated, and apparently glandular tumors in the neck, running down beneath the clavicle. There is no enlargement of the spleen or alteration of the blood. Operation would seem to be unjustifiable, as it would be impossible to remove all the disease. Treatment by the iodides and bromide was pursued for six months with success. The glands subsided, and he remained well a year. Now they are recurring, and he comes again to resume treatment.

Case V. Active, nervous business man, aged fifty years. A chain of glands, hard, but small, under the nipple, along the axillary border, and in the neck, also a few glands in the neck on the other side. No enlargement of spleen, no anæmia. Patient very anxious and restless. Thinks he is a doomed man. Operation not to be thought of. Bromides, iodides, and iron largely. At the end of one month no increase; at end of two months decided decrease of glands. Still under treatment.

Case VI. Stout, hearty man of forty-five years, always well, a chlorine bleacher by profession. Six months before had swelling of cheek begin, with stiffness of lower jaw, pushing out of ear, some deafness, much ear- and neck-ache, tenderness jaw bone, and some of gums; teeth extracted without relief. Tried a great

[1] See Medical Analectic, 1888, p. 203.

variety of treatment for months without effect. Now whole of mouth and gums healthy. Parotid largely swollen, jaw set, great pain ; shining spots and small tubercular-looking abscesses, and many lumps over surface of parotid region ; ear everted, neck somewhat œdematous, no deep sinuses, no bone to be felt ; sero-purulent discharge, but of small amount. Comes from another State to seek surgery, and is all ready to have his jaw cut out. Operation discouraged. Treatment, bichloride of mercury and iron, constant application of ung. hyd. nitratis to parotid, occasionally iodide of potash, iodide of iron, and bromide of potash. Mercurial treatment long continued and carefully watched. Patient comes to me from Rhode Island regularly once a week for a year. Entire cure of all the symptoms.

Case VII. An active and energetic middle-aged lawyer, with a bronchocele as large as a lemon, covered with vessels, causing asthma and hoarseness, and interfering with active walking and speaking. Treatment, the iodides very largely for six months, with iron and some bromide. Subsidence of tumor, relief of voice and of breathing ; able to go into court, etc. Relief, but not cure.

Case VIII. At the age of seventy-two a lady who had noticed an enlargement of the lower abdomen, strained herself over a trunk in packing, took a fatiguing journey, and came to me with incipient and localized peritonitis.

Rest, fomentations, and opium relieved the acute symptoms. An examination then made revealed a moderate-sized cyst in the lower part of the abdomen, which was thought to be ovarian. She remained in bed some months by my advice, as she was quite feeble, and was treated with iron, the iodides, and bromide, and careful feeding and nursing. The tumor diminished very positively, and she then got up and wore a swathe. Was easy and comfortable, and went home to Nantucket, and continued treatment. At this date, six years later, she considers herself well ; and at the age of seventy-eight is quite active, and believes that her tumor is gone. I have not had an occasion to verify this by examination.

Case IX. A man about forty years. An induration on the dorsum of the penis, in the corpus cavernosum, flat, fixed, not tender. No glandular enlargements. Complains of painful erections. No gonorrhœa, stricture, or syphilis. Induration of very gradual and insensible formation, and of several years' duration. Six months of treatment by bichloride mercury and iron. Induration almost gone.

Case X. An old gentleman, a college professor, married, of blameless life, began to notice at sixty-eight to seventy years of age, an induration on the dorsum of the penis in the corpus cavernosum, flat, fixed, painless. Only complaint is of persistent and painful erections, in the night. No enlarged glands. Only partial relief by treatment, which was by colchicum and iodide of potash.

I sent the patient to see Dr. Van Buren, who considered the disease to be gout.

Case XI. A parallel case in every respect ; same diagnosis, and same result. It is fair to say that cases ten and eleven did not satisfy me by persisting a long time with the treatment.

By the courtesy of Dr. S. W. Torrey, of Beverly, I am permitted to add the following case :

Case XII. "The patient had an abdominal growth in right hypochondrium, which appeared shortly after a croupous pneumonia of right lung, and which was attended by loss of strength, emaciation, very quick pulse, and a moderate amount of pain, especially on pressure, and on the patient's lying on the right side. The tumor increased in size after I first noticed it quite rapidly, and was a source of much discomfort, I think it must have been as large as a moderate-sized cocoa-nut when I sent the patient to you. I had proved by free purging that it was not fæcal impaction, it evidently was not a cyst or an abscess, and I was inclined to think it was a malignant growth. You wrote me that you thought it 'either sarcoma or carcinoma,' and gave an unfavorable prognosis, and I feared you were right ; but I put the patient upon iodide of potassium, beginning with doses of ten grains three times a day, and rapidly increasing it until she took ʒ iss. at a dose. When she became very uncomfortable from the effects of such large doses I changed to correspondingly large doses of Fowler's solution, but marked diminution of the size of the growth took place under the use of the iodide only, so I finally kept her entirely upon that, until the tumor disappeared altogether, which happy event took place in about three

months. The growth was not to be found again for, I think, about three years, when it appeared in the same location, and was about as large as a billiard ball when my attention was called to it. This time the general condition of patient was much better, and the tumor disappeared more rapidly under the use solely of large doses of iodide. At this time I found a small hard round growth just under and adherent to the skin of the right side of the neck, which looked like the nodules found in cases of multiple sarcoma, about as large as a good-sized pea. This growth became somewhat smaller while the abdominal growth was disappearing.

"Since then there has been no reappearance of the abdominal growth, as I was assured to-day by the patient herself, and the general health is excellent. The growth on the neck is twice as large as it was three years ago, but is the source of no discomfort. If ever I am allowed to remove it I shall feel greatly interested to learn its histological characteristics as possibly furnishing information as to the nature of the abdominal growth."

There was neither the history nor the other appearances of syphilis in any of these cases. In most of them an operation would have been injudicious. The remedies were given in the following doses:

Bichloride of mercury, $\frac{1}{3\frac{1}{2}}$ to $\frac{1}{3}$ of a gr., daily; tinct. ferri muriatis, gtts. xxx, daily; iodide of iron, iii to vi grs., daily; iodide of potash, grs. xv to xxx, daily; bromide of potash, grs. xx, daily; liq. potassæ arsenitis, gtts. ix to xv, daily, omitting one week in each month.

In the course of my practice I have *once* seen a case where no arsenic could be tolerated, and *twice* where the iodides could not be borne. I have had no success with chian turpentine. I am now trying chloride of lime (an old remedy) for glandular enlargements.

In the discussion following the reading of this paper, Drs. Richardson and Beach referred to the case of a woman who presented herself with what appeared to be chronic inflammatory swelling of both breasts. Under KI the swelling disappeared in both breasts. A few weeks later she returned with a tumor in the left breast which did not yield to treatment, and on being excised was found to be malignant.

Dr. Thompson narrated the case of a German woman, forty-five years of age. There were four tumors, which distended the abdomen very much, and there was a good deal of disturbance in the digestive function and a very sallow complexion. The case was one that promised very little prospect of relief under treatment. I resorted to alternatives. Bromide of potassium was one of the remedies that I used considerably, and also some preparation of calomel and tonics.

The tumors, after the course of a month, began to diminish in size, and in a year they had disappeared. The patient had always had poor health, and never had any children, and there was a good deal of disturbance from that time onward, and as long as she lived, which was about a dozen years. The tumors never returned, and she never complained of any serious trouble with the abdomen subsequently, although there was a morbid state of the secretions of the liver, and the digestive function was very imperfect and irregular while she lived.

Dr. Warren remembered a very extreme case in the person of a man who was ill with some internal growth. An examination of the rectum was made, and a large tumor was felt in the pelvis, which was pronounced sarcoma. Under treatment by the iodide of potassium, however, the patient got well and the growth disappeared entirely.

The conclusion arrived at by the author of the paper is, "that when we think it is not proper to operate, we should never leave a case without treatment. The mind and body both must be treated, and if we fail to give treatment they will not only be very unhappy, but will go off to some irregular practitioner, and either get an unexpected relief, to the damage of the medical profession; or else be very much injured by injudicious and harsh medication.—*Boston Med. and Surg. Jour.*, June 21, 1888.

Macdonald, (M. G.) on a Case of Thermic Fever—Bloodletting.—A laborer of 50, who had been idle and drinking, obtained employment in tearing down an old building. He did not perspire during the day and about 5 P.M. was seized with unconsciousness and clonic spasms.

His condition on admission was as follows: Pulse very small and fast; temperature 109° F. in rectum; respiration 60, shallow and sighing; skin dry and hot; pupils widely dilated; heart's action very

irregular; cyanosis marked. Patient in clonic syasms, tossing about and completely unconscious. Sphincters did not relax, nor was there any vomiting. He was given morphia, gr. $\frac{1}{4}$, with atropia, gr. $\frac{1}{100}$, and brandy, 3 j, hypodermically; stripped and placed on a water-proof bed, ice-cap put on, and his body rubbed with ice and dashed with ice water. Brandy repeatedly freely. The thermometer was removed frequently from the rectum, shaken down and returned. After twenty minutes, temperature had fallen only half degree, when twenty-four ounces of ice were thrown into the rectum, and external icing continued. At the expiration of an hour the temperature had fallen to 102°. Patient not otherwise improved. Was transferred to a dry bed. Ice-bags to neck and spine continued. Although stimulants had been administered freely, the face and extremities became deeply cyanosed, radial pulse very feeble, heart's action labored and irregular. Mustard was applied to precordial space. Wet cupping was attempted at right mastoid, but failed, only a few drops of dark semi-fluid blood being withdrawn. Then the basilic vein was opened, and eight ounces of dark semi-coagulated blood withdrawn. Temperature now fell to 100°, pulse and respiration improved. Patient began to swallow brandy and water.

Two hours later temperature again rose to 107.5°, and icing again resorted to. An enema of antifebrin, gr. xx, was administered.

At midnight, temperature, 101°, pulse 120 and of good quality; patient fully conscious; clonic spasm relieved; cyanosis disappeared.

During early morning, several purpuric spots appeared on the limbs, and he had some hemorrhage from the rectum. Morning temperature 99.5°, pulse 90, respiration normal a slight perspiration.

During forenoon following, patient vomited some curdled milk, and had some diarrhœa. Vomiting ceased after changing diet to peptonized milk.

Since then the patient has done well.—*Albany Med. Annals*, June, 1888.

Clark (D.) on Neurasthenia.—The author summarizes the treatment as follows:

1st. Rest and cheerfulness for the anæmic.

2d. Out-door exercise and work for the plethoric and sedative.

3d. Fresh air, substantial food and absolute cleanliness for both classes, as a rule.

4th. No chloral, no opium, no alcohol; in short, no artificial stimulant, soporific or narcotic, of any kind. Three hours of natural sleep or rest have in them more recuperative power than nine hours of stupor or drugged quietude. Such short cuts to rest only murder natural sleep and strangle the heroic efforts of nature to come back to normal conditions. Even when these stilts are used, it must be after serious and thorough deliberation.

5th. Any employment which will have a tendency to divert the mind away from self-contemplation, and, in short, seeking relief by law of substitution.

6th. I find the best remedies are such as the arsenites, cod-liver oil, zinci phosphidi, ferri pyrophosphate, nux vomica, bromides with caffeine, zinc oxide with ergot, and such like.

These tonics and calmatives assist nature to seek again the old paths. If sedatives, or narcotics, or stimulants are administered, it is well to mask them as much as possible. We all know their seductive power, and I have been told by dozens of victims to the alcohol, chloral, or opium habit, that the first knowledge they had of the pleasurable potency of such drugs was received from the family physicians. After their visits ceased the remedy became a luxury, and the druggist was applied to for the material to inflict infinite injury to many a valuable life.—*Canadian Practitioner*, July, 1888.

MISCELLANEOUS.

Preservation of Urine.—Of peculiar interest is a communication of Professor Salkowski to a Vienna medical journal on the use of chloroform for the preservation of samples of urine by the analyst. A six-per-mille solution was found by him to effectively prevent the growth of micro-organisms, and he reccommends it to be employed for keeping pathological liquids, and for the storage of anatomical preparations. Moreover, he suggests the employment of such a solution internally as a disinfectant and as a mouth-wash, and observes that it it could be advantageously added to hypodermic injections.—*Medical Press*, June 6, 1888.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital. CONDICT W. CUTLER, M.D., Instructor in Diseases of the Skin, Post-Graduate Medical School, New York.

VOL. V., NO. 29. July 19, 1888. WHOLE NO. 77.

CONTENTS.

	PAGE
Leading Articles	341
Therapeutics	344
Medicine	346
Surgery	348

LEADING ARTICLES.

On Simple Duodenal Ulcer.—Although not recognized so early as gastric ulcer, those of the duodenum have been separately described for upwards of sixty years. They seem of very much less frequent occurrence than gastric ulcers, and their rarity and the difficulty surrounding their diagnosis, will render a brief mention of some recently reported cases interesting.

An ulcer of the duodenum is probably produced in the same way as a simple ulcer of the stomach, *i. e.*, by a process of thrombosis or embolism, followed by necrosis of the tissue thus deprived of blood, and subsequent digestion of the same by the fluid contents of the viscus.

The appearance of the ulcer, and the fact that it is never found below a point which may be reached by the gastric juice, render this explanation extremely probable.

Dr. Maurice Letulle, in a recent article,[1] advances data which seem to prove an infectious origin of some simple ulcers of the stomach and duodenum. He has seen two cases of simple ulcer of the stomach and duodenum occurring during convalescence from infectious disease, produced, he thinks, by the collection of colonies of microbes in the gastro-duodenal region. In a case of puerperal septicæmia, with two fresh hemorrhagic ulcers of the stomach, he found the small veins, underlying the ulcerated mucous membrane, closed by thrombi containing a great number of streptococci, while venous sinuses elsewhere were stuffed with colonies of them.

The experimenter has reproduced in guinea-pigs the same mucous and submucous lesions with a pure culture from a case of dysentery, and also with the staphylococcus pyogenes aureus. The lesions thus obtained varied from ecchymoses to large round ulcerations which threatened to cause perforations of the walls when the stomach was experimentally dilated.

From published cases it seems likely that duodenal runs a more chronic course than gastric ulcer. The explanation of this perhaps lies in the facts that the duodenum is less mobile than the stomach, that the gastric secretions traversing it have lost some of their digestive strength by dilution and occasional admixture with intestinal and pancreatic juices, and also by the fact that the ulceration, generally occurring on the posterior wall, produces an agglutination of subjacent tissues, particularly the pancreas, which militates against perforation. Thus it happens that duodenal ulcer, more often than gastric ulcer, kills by repeated and exhausting hemorrhage, less often by perforation and peritonitis.

In a case reported by Gairdner[2] a hematemesis had occurred fifteen years before the fatal illness.

The patient was a brass-finisher, æt. thirty-six. The symptoms of indigestion, pain and vomiting, were of three years' duration, and were very distinctively those of dilated stomach. The stomach was therefore very carefully washed out by the syphon every second day, with considerable sense of relief to the pain, which was altogether typical of chronic gastric ulcer.

[1] *L'Union Médicale*, June 23, 1888.

[2] *Glasgow Med. Jour.*, June, 1888.

Sarcinæ were only once detected in the vomited matters, and no blood until about six weeks after admission. During this interval, also, the patient progressively gained in weight, and every prospect was presented of making a permanent impression on the disease. About this time, however, blood began to appear in the washings, and there was a notable increase of the gastric pain. A week later, thirty-six ounces of highly bloody fluid was spontaneously vomited.

From this time onwards (11th February) patient was evidently losing ground. He complained greatly of gastric pain, coming on very often during the night, and requiring the use of large doses of morphia. The stomach was washed out occasionally without any evidence of further bleeding, until the 30th March, when, as also on the 2d April, large quantities of blood were discharged, both upwards and downwards, with cold perspiration and fainting on the latter occasion. Anæmia and emaciation were progressively increasing, and owing to the peculiar pigmentation of the skin, a suspicion arose of Addison's disease. Notwithstanding all remedies, he again vomited large quantities of blood on the 13th and 14th April, and on the latter day he died, almost exactly four months after his admission.

On opening the body, and removing the stomach, it was thought to be a case of cancer, because there was a hard mass below the pylorus, with attachment to the pancreas, which also seemed to be affected, as it could not be removed from the duodenum without being torn. It was a large, hard mass, which was, however, seen to be of inflammatory origin of long standing. The ulcer was quadrilateral in shape, about an inch in diameter, with abrupt edges, and partly involved the pylorus. The base of the ulcer was pancreatic tissue, and in it was an eroded artery. The stomach was much dilated, and its muscular coat thickened.

In by no means all cases do grave symptoms precede for a long time the fatal illness. Dr. F. W. Robbins, of Detroit, has described [1] a specimen, removed from a patient of middle age, who had never required a physician's services, and had suffered from nothing graver than dyspepsia. He had been called to see him and had found him suffering intense pain just below the liver in the median line. Thinking it might be an attack of colic, he gave him ample doses of morphine. In the afternoon of this day the pulse increased, and he then suspected serious difficulty. Next morning the pulse was still quicker, and the patient gradually grew worse and died. On post-mortem examination he found a perforating ulcer of the duodenum just below the pyloric valve.

In this case, and in fact in almost all reported cases, dyspeptic symptoms are prominent. In a second case of Gairdner,[2] a clerk, æt. 27, was subject for two years to occasional attacks of sickness, pain, and vomiting, generally two attacks a year. The attack which proved fatal had lasted about 6 months. There was great tenderness, but no limited pain. On July 16, 1887, he had an attack of syncope, followed by great prostration, and a similar attack next day. After this altered blood was passed by the bowel and a state of anæmia developed. He improved greatly and the cardiac symptoms disappeared. About the beginning of September, however, he got worse. Pain and vomiting became more severe, and there was collapse. This continued, and he gradually sank and died. There was a large quantity of altered blood found after death in the large intestine, a smaller amount in the smaller intestine, and none in the stomach.

The ulcer was an inch in diameter, a little lower down in the duodenum, but otherwise of the same appearance as the case previously mentioned by the same author.

These ulcers by their chronicity, their occasional implication of the pylorus, and the inflammatory infiltration they excite in neighboring tissues, are occasionally diagnosed as cancers and twice have been excised as such by Billroth.

From a careful study of the subject no definite rules can be laid down by means of which we can tell whether a suspected ulcer lies just above or just below the pylorus, as the symptoms supposed to be pathognomonic of one condition have been recognized in the other. As the treatment of the two conditions should be about the same, this lack of ability to differentiate is unimportant and possesses only a scientific interest.

[1] *Am. Lancet*, Jan, 1888.

[2] L. c.

Hicks (J. B.) on the Influence of Bodily Movements over Septic Absorption.—When, by the act of inspiration the capacity of the chest is increased, a tendency to vacuum exists, which is corrected by two methods: 1st, by the ingress of air through the larynx; 2d, by the flow of blood through the various veins leading toward the heart; for, during inspiration, the normal support of these vessels, which exists during the pause preceding, is lessened, and thus the external air-pressure existing on the general vascular system immediately acts, and corrects the lessened tension by pressing the blood heartward.

When the diaphragm descends it presses on the contents of the abdomen, and these press correspondingly in all directions. And although the increased diameter of the base of the chest, to which the walls of the abdomen are attached, would tend to increase the capacity of the abdomen at the upper part, and thus lessen the pressure within the abdomen, yet there is a marked residuum of pressure during each inspiration.

So much for normal respiration. If, however, a sudden inspiratory movement takes place, voluntary or otherwise, before the depression of the diaphragm can occur, then, instead of there being a residuum pressure in the abdomen, there is a tendency to a vacuum. Again, if, by voluntary effort, or by any restraint, the ribs are unable to rise—in other words, the base of the thorax cannot expand,—then there is an increase of the pressure when the diaphragm descends; the usual condition resulting from tight-lacing, or the use of the belt. Laughing, coughing, and even sudden movements of other parts than the trunk, of the legs and arms, produce the same result although to a less degree.

If the effect of a sudden inspiration be to produce a vacuum within the abdomen, as it does within the thorax, then its importance, as a possible source of danger, must be self-evident to any one who has studied medicine.

No doubt the elasticity of the abdominal walls and their yielding nature materially minimize the effects of the thoracic vacuum, yet it can readily be shown that it is not completely reduced, and, under some conditions, scarcely at all.

Where the abdomen is distended, the effect of inspiration or bodily movements is necessarily lessened.

Such a vacuum causes a corresponding sudden rush toward the chest in the veins principally; and doubtless also in the lymphatics; at the same time the outward current in the arteries would, by the same force, be checked. An opportunity would thus be given for lodgment of any clots which might have been formed in the veins. So also in the case of wounds, a facility is given for an unhealthy material to be drawn into the current through the severed ends of veins or lymphatics, such as a portion of the plug, which might be purulent or ichorous. Doubtless in conditions of perfect health these accidents would generally be guarded against by the firmness of the plugs, and the absence of irritating matter, but in a wound in an unhealthy state, contrary conditions are present favoring the translation of portions of unhealthy plugs or of septic matter in a more fluid state. And if we admit the possibility of these things occurring, how much more are they likely to take place in the puerperal woman, or in other similar conditions, where every facility is given for the formation and increase of sepsis in consequence of the retention of sanious fluids at a high temperature scantily supplied with air, and where easy opportunity exists for its absorption through recently divided vessels of large calibre. Indeed, in practice I have, I think, had sufficient evidence to prove that vigorous movements of the puerperium have been important factors in initiating attacks of septic fever, and of renewing them during their subsidence. Unless I am much mistaken, the renewal of the attacks of rigors, fever, and sweating has been produced by such movements. At any rate, I have known cases where these attacks have followed each time the patient had been much moved—I mean by getting out of bed, sitting up, or changing room. So much has this impressed me by frequent occurrence, that on seeing patients in consultation, with an account of renewals of shiverings, etc., I have made special inquiries, and found very frequently that these have followed those disturbances.

But if these conclusions are correct, another question will present itself to us. May we not, in manipulating the uterus freely charged with unhealthy fluids within, be favoring unwittingly septic infection, especially if the patient has been already under its influence? That this is probable seems to be borne out by the fact that I

have observed in many cases where I have been obliged, in consequence of hemorrhage or fever, to remove from the interior of the uterus retained portions of placenta and firm clots; indeed, I look forward to a slight increase of fever after these manipulations. The sudden removal of the hand after firmly pressing in the abdominal walls might, it appears to me, somewhat favor an indrawing.

There is another circumstance in the puerperal state which can also favor septic absorption from the inner surface of the uterus, namely, the sudden turning on the side from the back. At this time the walls of the abdomen are very often relaxed and flabby; so that when the patient rolls over on her side, the abdomen and uterus fall over in a marked degree if unsupported; and thus there is a tendency to a vacuum determining a flow toward the abdominal cavity. If any one doubts this tendency, he has only to place a woman with relaxed parts and flaccid abdominal walls in the knee-elbow posture and open the vulva with two fingers, and he will at once perceive that the inrush of air is very marked. We take advantage of this fact in our attempts to restore the retroflected pregnant or heavy uterus.

But the principle which underlies these facts does not belong to the puerperium, but to all cases under like conditions in abdominal and gynecological surgery. Theoretically we may say that by mechanically checking or restraining the elevation of the ribs and abdomen by a bandage, we in a very considerable degree lessen the risk attending rapid and sudden movements. —*Am. Jour. Med. Sci.*, July, 1888.

THERAPEUTICS.

Shall Venesection be Revived?—In a letter to the *Medical World*, July, 1888, Dr. G. W. Kemper, of Port Republic, Va., says:

An article on blood-letting in February No. of the MEDICAL ANALECTIC, accords so well with my views and experience that I deem it proper to add a few reflections corroborative of the views therein given. About the time of my graduation (1836) the doctrine of Broussais on the subject of fever was generally received, and, though a change of sentiment soon took place in regard to his views on the etiology of fevers, yet he gave utterance to a sentiment which indicates the manner of treating inflammatory diseases at that period, and which practice continued for many years subsequent to that time without any doubt as to its propriety. The sentiment, "The fear of debility has slain its thousands," to which he gave utterance, may have induced the too free use of depleting remedies, and, as a consequence, may have led to the opposite extreme in the treatment of disease.

Anxiety to discover and adopt new remedies led many of us to give up old and reliable ones for novelty or fashion's sake. The result has been a grave disappointment when submitted to clinical test, although the remedies were recommended by those in whom we have confidence.

That the type of diseases has undergone some change, though the cause is inexplicable, I feel disposed to admit, and an experience running back half a century I think justifies an opinion. I don't remember having treated a case of pneumonia or pleurisy during ten years of my early practice without venesection, nor do I remember to have lost but one patient out of a considerable number. Though so successful with bleeding during that period, in 1847 there was an epidemic of pneumonia in this vicinity, almost exclusively among the negroes, and the type so changed from what I had formerly seen that bleeding was regarded as inappropriate, and all save one (some thirty in number) recovered by cupping, blistering, and tartar emetic in pill and oft repeated doses.

Since that time a very large percentage of cases of pneumonia have not required or justified venesection, yet I meet with cases now and then in which I regard bleeding as imperatively demanded.

I remember a case a few years ago of a violent attack, in which pain and dyspnœa were distressing. Having no doubt of the most energetic, prompt, and reliable remedy, I drew blood to the amount of twenty or more ounces, with a success far beyond my expectation, for, without any other remedy of consequence, the disease was aborted, and the third day the patient returned to his duty as stable-boss at the iron works. Such decided result may not generally be expected, though I have known other physicians to have similar experience. In further proof of the efficacy and value of this remedy, the relief and comfort of the patient fully attest.

Some years ago the subject of pneumonia was discussed at a meeting of the American Medical Association, and I was surprised at the diametrically opposite views upon the subject of venesection in that disease by gentlemen of national reputation, and decided that their practice was in accord with the theory they entertained in regarding debility as the greatest source of danger in that disease.

It is a question of some import to decide whether the remedies used for the cure of this disease or the disease itself are more potent factors in producing debility. While I admit that both have such tendency, with due deference to the opinion of others, I must say that, in a large majority of cases. the debility and depression result more from the disease, and if by depletion we can, with reasonable prospects of success, modify or cure the disease, we have no cause to fear the danger of such depletion.

It might be inferred that I am an advocate of the almost indiscriminate use of the lancet. Such, however, is not the fact; but whenever the heart beat and fever in my judgment indicate bleeding, the fear of subsequent debility has no terror for me, but rather fear that the excessive arterial action may produce that which is so dreaded.

During the bad weather in February last pneumonia was prevalent here. Though an advocate for venesection, I did not regard these cases as requiring that remedy, though I believe that bleeding would have been successful, I treated some twenty cases with the new remedy, antifebrine, with little else than hot fomentations, and after subsidence of fever, blistering, without the loss of a single case. The most critical was a lady some three months *enciente*, with whom abortion occurred the second week.

Notwithstanding the discovery of new antipyretics, and the favorable action of the remedy named above, I would never be willing to give up blood-letting, which in proper cases will do more in twenty minutes than any other remedy in that many hours. That the recent discovery of so many antipyretics will obviate the necessity of bleeding in many cases, there can be no doubt. But the idea that any thing yet discovered will equal or compare with the abstraction of blood in cases of high fever and congestion, seems to me untenable, if not preposterous. While I admit that venesection may have been used in former times without proper discrimination, and for which there was some excuse, not having the benefit of recent discoveries to produce the same end, I am equally confident that we greatly err in denouncing this remedy as needless, if not dangerous, and educating the young practitioners in that belief. That the imminent danger from bleeding is a phantom of the imagination, I think would be sustained by a large majority of old practitioners, who have had ample experience to know whereof they speak.

Cowden (J. D.) on the External Application of Sulphur in Sciatic Neuralgia.—The patient was a strong man of forty-five. The limb was enveloped in dry sulphur. In less than two hours he was sweating profusely, sleeping soundly, and oblivious to all pain and suffering. He woke up in the evening long enough to take some nourishment, then again fell asleep and slept continuously during the following night, the perspiration continuing, and awoke in the morning free from pain, able to turn over in bed and move and extend the limb in all directions without complaint. The look of suffering that had been so marked before the application of the sulphur was gone. He then got up, and, to his great surprise, walked easily about the room without suffering or pain. He was then put into a large washtub, thoroughly scrubbed and washed with soap and water, after which, at his own request, he was again put to bed, and the sulphur reapplied to the limb and sacral region of the spine. The next morning he was given another bath, the neuralgia had disappeared, and from that time on, without further medication, his recovery was continuous and, so far as the pain is concerned, up to this writing is complete.

The perspiration, the breath, and urine, after the application of the sulphur, were very soon impregnated with sulphuretted hydrogen, making it very disagreeable for the patient and his attendants on that account. —*Jour. Am. Med. Ass'n*, July 7, 1888.

Dr. W. F. McNutt writes to the *Med. News*, July 7, 1888: It has been my custom while using sulphur externally, as advised by Fuller, to administer it freely internally, and, when there is anæmia, to combine it with iron; for instance, my usual formula is:

℞.—Sulphur. (præcip.):
Ferri carb. . . . . āā ʒ iv.
Glycerini . . . . . ʒ iv.
Aquæ gaultheriæ . . . ad ℥ iv.
A teaspoonful every two hours.

I also frequently used this formula in the treatment of the diseases which seem to have a rheumatic tendency, such as diphtheria, scarlet-fever, chorea, etc.

La Moure (U. D.) on Paraldehyde in Obstinate Vomiting.—I have used it in ovarian irritability with sympathetic stomach disorder, in vomiting of pregnancy, and in the distressing nausea of migraine, with the most gratifying results. The formula employed is as follows: ℞ Paraldehyde, m xl; elix. simp., ʒ i. M. S. One tablespoonful in a little water, repeated in half an hour, if required. This small dose in its effects is not hypnotic, acts as a sedative not only upon the mucous membrane of the stomach, but also has a tranquillizing effect upon the whole system. But few doses are usually required. The only objection to its use is its disagreeable odor.—*Albany Med. Annals*, June, 1888.

Chambers (M. L.) on Oxalate of Cerium in Dysmenorrhœa.—A number of years ago a young lady visiting in this locality applied to me for a remedy for the relief of dysmenorrhœa. She was of fine physique, in perfect health, and stated that she expected her "sickness" on the following day.

Looking into her ruddy face, I thought a little pain would do her less harm than a dose of morphine, the only thing I had at hand in which I had any confidence as a remedy; so I compromised with my professional conscience in order to please the expectation of my patient, and gave her, as I thought, a simple placebo, which should have the merit at least of being tasteless and harmless. This was oxalate of cerium, four powders of five grains each, one to be taken every hour until the pain should be relieved. To my surprise I received a note from the lady a short time after, asking for some more of those powders, and stating that three of them had given her entire relief. This was not sufficient to establish my belief in oxalate of cerium as a remedy for dysmenorrhœa, but I accepted the lady's statement as a hint for future experiment, and began giving the oxalate to all applicants for relief from this disorder. I soon learned that in certain forms of dysmenorrhœa it is as near a specific as the Materia Medica furnishes for any disease.

It is in that kind, however, frequently occurring in fleshy and robust women with scanty discharge, in which the pain comes on before the flow, or at its commencement, is spasmodic or colicky, accompanied by a feeling of tenesmus, and is relieved when the flow is thoroughly established, that the remedy is most useful. I do not remember a failure when given in cases selected with reference to these symptoms. I give it in powders of six grains each, one to be taken every hour until the pain is relieved.

Sometimes the oxalate of cerium contains small quantities of arsenic as an impurity; in which case it will irritate a delicate stomach if given in sufficient quantities. When pure, I have never seen an ill effect from it whatever.—*Med. Record*, July 7, 1888.

Muriate of Ammonia in Myalgia.—In a letter to the *St. Louis Med. and Surg. Jour.*, July, 1888, Dr. Wm. Henry of Harmon, Ills., calls attention to this old but neglected mode of treatment. He says:

"I have for a number of years used nothing but hydrochlorate of ammonia in these cases with almost uniform success. I give it in large doses—20 to 30 grains three or four times a day. The remedy should be kept up for some time after the pain has ceased."

MEDICINE.

Livon (C.) and Alezais (H.) on the Urine of Tabetic Patients.—In the *Marseille-Médical* for April and May, 1888, the authors have an elaborate paper on the above subject, embodying the results of observations and chemical analyses of the urine in severe cases of locomotor ataxia.

They find that the quantity of urine secreted in 24 hours is habitually small. This scanty urine contains a subnormal amount of phosphoric acid and urea, and as a general thing an increased percentage of the chlorides. They also find the urine of tabetics much more toxic than normal urine.

Whittaker (J. T.) on the Therapy of Tuberculosis Pulmonis.—The author has noticed improvement, in hopeless cases of phthisis, follow the administration of drop-doses of the sulphide of allyl,

which is the essential oil of garlic. This remedy had to be abandoned because of the intolerable odor it imparted to the entire person of the patient.

From the sulphide to the sulpho-cyanate of allyl is but a step, and accordingly he began next with this preparation, which is the oil of black mustard. The oil of mustard entirely prevents the development of bacteria in the proportion of 1 to 33,000, and hinders their development in the proportion of 1 to 330,000.

Mitscherlich reports it as the most dangerous of all the ethereal oils. Henze agrees with him in this regard, remarking that the initial dose must be very small, else it may be attended with instant death. It reduces the temperature, retards the pulse after first increasing it, and has the same effect upon the respiration. Experiments were commenced only in hopelessly advanced cases, with the fraction of a drop as obtained by dilution in alcohol and water. The drug is intensely irritating even when diluted in half a glass of water, so that the maximum dose is but three drops. One and a half drops given three times a day excite, in copious dilution, over the whole chest and abdomen a feeling of warmth which ceases to be disagreeable in a few minutes. Beyond the first feelings of heat and irritation in the throat, nose, and eyes, experienced as a rule only with the first doses, there is no discomfort, and with the dose administered there is no symptom whatever of danger on the part of the organs of circulation and respiration. No odor issues from the surface, and there is but slight odor—that of horseradish rather than garlic—in the breath. As his observations with this remedy extend over a period of but one month, and include but six cases thus far, he is not prepared to speak definitely as yet of results. The general condition of all the patients continues to improve in so far that they feel better, as they say, without exception. None of them have lost weight in this time, cough and expectoration are materially reduced in every case, but one night-sweat has occurred in one case, and in all but one case there has been no marked elevation of temperature. In this exceptional case and most advanced case of all, the temperature ran up one evening to 105°, to subside on the next morning and remain since at 99° F.

The results which he has seen in these hopeless cases encourage the hope that more decided action may be exerted in cases earlier in the history of the disease.—*Med. Register.* June 30, 1888.

Nichols (F. P.) on the Treatment of Chronic Dysentery and its Allies.—The class of cases I refer to complain of frequent passage of small bloody stools, inability to hold their motions, with more or less abdominal discomfort and dyspeptic symptoms. On careful examination it is found that there is no proper diarrhœa; the motions are lumpy, often consisting of half-digested materials, with a large quantity of blood-stained mucus, and though frequent but little true fæcal matter passes. In these cases a prolonged course of saline aperients has a remarkable effect, the disease being to a large extent mechanical, the result of hardened fæces passing over an irritable mucous membrane. As a rule these patients have never had an acute attack of dysentery, and the above simple treatment, combined with an easily digested, nutritious diet, often suffices to cure them. The treatment requires to be persevered in long after apparent recovery. *Brit. Med. Jour.*, June 16, 1888.

Billings (F.) on Three Recoveries from Tetanus.—The first recovery was that of a thirty-year-old man who had been wounded by a pitchfork through the foot, passing downward from the dorsum. He did not come to the hospital until trismus had commenced. As the foot wound was suppurating, the house surgeon opened up the local wound, and dressed it antiseptically. Tetanus developed. The third day after the patient entered the hospital the sciatic nerve of that side was stretched without result. Three days afterward the crural nerves were stretched. Then the sciatic nerves were again stretched, without marked effect. At the same time the patient was given morphine and chloral. Afterward eighth grain hypodermic injections of physostigmine were then given every three hours until three grain doses were taken. The patient suddenly exhibited all the characteristic symptoms of physostigmine poisoning;—pin-point pupils, and rapid, weak pulse, œdema of the lungs with rapid superficial breathing. Under atropine and digitalis he soon recovered. The first thing he did was to assume the tetanus position—opisthotonos. He eventually recovered, but never regained his strength of mind. He was simple, had a peculiar

laugh, and talked a great deal. Before, he had been a silent man, but he became very garrulous, and was the clown of the ward.

A man was brought to the hospital with a simple fracture of one tibia. In two weeks trismus suddenly developed after a chill. On examining the man I detected fluctuation over the seat of fracture. The bones were freely movable. Dr. Isham was the attending surgeon. It was made a compound fracture and drained thoroughly. Although the trismus remained for several days, the man ultimately recovered, with perfect union of the bones.

A boy received a crushing injury of one leg. I amputated the leg in its upper third. The flaps united very well. About the seventh day he was taken with a chill, and trismus commenced, followed by tetanus. The friends of the boy consented to have the sciatic nerve stretched, but when we attempted it the warden and chairman of the hospital committee interfered, and commanded us to take the boy back. As a result the old medical board stepped out of the County Hospital. We afterward stretched the nerve, and the boy recovered.

Dr. J. A. Robinson reports the case of a man who was brought in May, 1887, with what was supposed to be cerebral meningitis: he had a high temperature, face flushed and of a purple hue. He was easily excited, and in a day or two symptoms of tetanus were noticed, trismus and opisthotonos occurring during the progress of the case. During the January previous, he had received a wound from a buzz saw in the second and third fingers of the right hand. He was sent to the surgical side, and these fingers were amputated. For several days it was doubtful if he would recover. He finally did, but became insane.—*Med. Standard*, July, 1888.

Anderson (Wm.) on a case of Malingering.—A girl aged sixteen, apparently in good health, was shown to me by the mistresses of a boarding school. She had been suffering for some days from a swollen and discolored hand. The weather having been cold, they at first attributed the swelling to chilblains, but now they were thoroughly frightened, and thought mortification had set in. I found the hand much swollon, the skin and nails of a purple hue, the back of the hand œdematous, and pitting on pressure. So serious did the case appear that an eminent physician, who was seeing another case in the house, saw her with me, and advised a deep incision in search of matter. This was not done, but, I directed them to have the young lady watched day and night, and report the result. A hole was made in her bedroom door, and the mistress undertook to watch all night. About the small hours she was seen to rise from her bed and proceed to a chest of drawers. From a corner of a drawer she produced a long coil of soft satin ribbon. This she wound round the upper arm very tightly, and then returned to bed. After some hours she unwound the ribbon, replaced it in its corner, and slipped into bed. In reply to their anxious solicitations for advice, I recommended change of air, and accordingly the black sheep was sent away home. —*Lancet*, June 23d, 1888.

SURGERY.

Homan (G.) on Rupture of the Long Head of Biceps Muscle.—A man of 40 was thrown violently from a flat car by a sudden movement of a railroad train which was blocking a street crossing, while the officer was in the act of climbing over it. Being thrown sidewise his right shoulder and arm struck the ground, the arm being twisted around, and he was soon afterwards taken to the office of Dr. William A. Fries, who has kindly given the following account of the injury and treatment:

"October 12, 1886, about 10.30 P.M., the officer was brought to my office, with a subglenoid dislocation of right humerus. I employed the usual methods for reduction, but failed on account of of the extreme resistance of the muscles. Chloroform was then administered by Dr. Moeller, and afterwards there was not much manipulation required to reduce it. I also found before reduction a contused condition of the shoulder in the region of the joint, coracoid and acromion processes, with extravasation of blood into the tissues of the soft parts—so much so that the exact condition of the muscles in the vicinity could not be made out at the time. The arm was bandaged lightly to the side of the chest, and was not disturbed for several days: this method of treatment was continued for several weeks, after which the dressings were removed and stimulating embrocations ordered. At this stage, the discovery was

made that when the forearm was flexed, a hard knot was found at the outer half of the belly of the biceps, which, in my opinion, resulted from a rupture of the long tendon, the consequence of this, and probably some injury to the deltoid, is that the arm cannot be raised to more than a right angle to the body, which is the condition at present."

When the patient's clothing is removed and the natural movements of a normal arm are attempted by him, he is unable to raise his hand or elbow above the level of the shoulder, while the power of supination in the forearm is nearly lost. In the upper portion of the outer half of the anterior aspect of the arm is an unnatural depression terminated abruptly by a knotted irregular elevation, in marked contrast to the appearance of the same region in the opposite arm.

The officer was a muscular, able-bodied man at the time the injury was received, weighing about 170 pounds. He has experienced much pain and inconvenience in consequence of it, and the right arm is practically totally disabled so far as usefulness in his present employment is concerned.—*St. Louis Cour. of Med.*, July, 1888.

Bryant (T.) on the Causes, Effects, and Treatment of Tension as met with in Surgical Practice.—The pain associated with every form of inflammation of the bone or of its periosteal covering is due to tension, and the severity of the pain is a fair measure of its intensity. In acute inflammation of the bone or its periosteum tension is the chief cause of necrosis; and in the subacute and chronic forms it is a potent cause of their chronicity, as well as of the destructive changes which as a rule follow. The relief of tension, wherever met with, when the result of inflammation, is an important principle of practice which should be always followed. In bone the principle is most imperative, on account of the difficulties under which natural processes act in that direction, by reason of the absence of elasticity or yielding in bone, and by reason of the anatomical arrangements of its vessels which favor blood stasis.

To relieve tension in the softer tissues of the body, the local application of leeches, local or general venesection, acupuncture, aspiration, punctures, and incisions may be requisite; whereas, to carry out the same practice in endostitis or periostitis, subcutaneous or open incisions down to the bone, and the drilling; trephining, or laying open of the bone by a saw may be required, the choice of method having to be determined by the requirements of the individual case.

In the early or hyperæmic stage of inflammation of bone, before destructive changes have taken place, experience seems clearly to indicate that the relief of tension —as indicated by a dull aching pain, etc.— by means of drilling or trephining into bone, may arrest the progress of the disease, and help towards a cure by resolution; whereas, in the exceptional cases in which this good result does not take place, suffering is saved and destructive changes are limited.

In articular ostitis, of every kind and variety and in every stage, this mode of treatment cannot be too strongly advocated, as tending towards the prevention of joint disease. In acute or chronic abscess of bone, diaphysial or epiphysial, the abscess cavity must be opened as any other of the soft parts, drained, and dressed in the most appropriate way—the principles of treatment being the same in hard or soft tissues, although they are modified by the anatomical condition of the parts.—*Lancet*, June 30, 1888.

Thornton (W. F.) on a Rare Case of Spontaneous Amputation.—A Central American Indian, æt. 22, gave the following history of his case:

"On the 12th of December, 1886, while in the woods gathering rubber, I stepped on a 'tomagar' snake, about three feet long, piecing it with a spur I wore for climbing trees; the snake bit me through the calf of the right leg about four inches below the knee. The leg began to swell at once, and in eighteen hours the swelling had extended to the abdomen. In thirty hours the entire right side, from the toes to the top of the head, was swollen and black.

"Fever began with the swelling and increased with it. Twenty hours after the bite I was found by my companions, who bathed me in a 'bush medicine,' and in two days the swelling had receded to the knee. I suffered no pain at all, only a sensation of weight. I was taken home and the swelling entirely disappeared, but left the skin below the bite apparently separated from the flesh. Pieces of skin dropped off from to time, in pieces of from three to four inches square, until all below the bite was destroyed, leaving the

muscles exposed. This occurred in one week after returning home.

"When the skin was removed, the point in the muscle where the tooth of the snake pierced was marked by a small scab. This was removed and pus in small amounts exuded, the flesh then began to gangrene.

"Three weeks after the skin had disappeared, profuse arterial hemorrhage occurred from the edges of the skin above the bite; this was controlled by 'bush medicine'; three times, at intervals of from one to two days, these hemorrhages occurred, but were controlled by local applications of 'bush medicine.' After these hemorrhages the muscles of the leg began to dry up and shrivel.

"April 8th I called may sister to help me put my foot in the hammock. It was hanging over the side; when she took hold of the heel and attempted to raise it the leg broke off even with edges of the skin; two weeks later a small piece of bone came out from the other side."

Such is the history as given to me. The stump looks as if an amputation had been performed at the junction of the upper and middle third of the leg, with retraction of the muscles. The tibia is covered with skin alone for two inches and a half; the small piece of bone that was removed two weeks after the leg dropped off was the upper end of the fibula. Along the outer side of the tibia there is caries. The patient denied having had any bandage or ligature about the limb. What "bush medicine" was could not be found out.—*St. Louis Med. and Surg. Journ.*, July, 1888.

Infertility in the Male.—Infertility in male may be due either to azoospermia (absence of spermatozoa) or aspermia (absence of emission). The product of emission consists, as is well known, of a mixture of three secretions, from the testicles, the seminal vesicles, and the prostatic glands. Dr. Fuerbringer has remarked that the testicles only produce motionless spermatozoa which become animated on admixture with the prostatic secretion, the importance of which as a factor in sexual impotence has been generally overlooked. According to some recent observations the prostatic glands secrete a milky, but non-viscid liquid, holding in emulsion a number of globular bodies, half the size of red blood corpuscles, and composed of lecithin. It is this secretion that gives the characteristic odor to the seminal emission, the other constituents being devoid of smell. The stimulating effect of the prostatic secretion is only exercised on viable spermatozoa, and it has no influence on those which for one reason or another are "dead." In several cases of young men whose semen contained these motionless spermatozoa, the latter became active enough on the addition of some prostatic secretion, the defect being thus evidently due to a want of it. Azoospermia proper is very rare, and when present is due either to atrophy of the secreting organs or occlusion of the vas deferens consequent on double epididymitis or gonorrhœal funiculitis. This affection no treatment can relieve, but aspermia, depending as it often does on stricture of the urethra, may be cured by removal of the stricture.—*Med. Press*, June 27, 1888.

Marsh (F.) on Fracture of the First Rib Alone.—Mr. Lane has found four *undoubted* examples of this injury in less than two hundred subjects consecutively examined in the dissecting-room of Guy's Hospital. The subjects were adult and well developed, and in each case the fracture occurred on the right side and in the following places: Case 1 (female). One inch and a quarter extending to the tubercle. Case 2 (male). At a point corresponding to the subclavian groove (ununited). Case 3 (male). At the site of the insertion of the scalenus medius. Case 4 (male). Immediately internal to the facet for articulation with the transverse process of the dorsal vertebra. One other case has been recorded, in the article on "Injuries to the Chest" in Holmes' "System of Surgery," third edition, by the late Mr. Lyell. This was a child run over, the left first rib being fractured posteriorly near the neck. We thus see that a fracture of this rib may take place almost at any point, but as yet there are not a sufficient number of cases to show the most common site. The fracture may be caused by direct or indirect violence, and three methods are suggested by Mr. Lane: (1) by direct violence to the posterior portion of rib, (2) by force applied to the manubrium sterni, and (3) by force transmitted through the clavicle.

Undoubted cases of fracture by methods 1 and 3 have come under my notice, and I am of opinion that if a fracture of the first costal arch, rather than of the sternum, is caused by method 2, the cartilage, if ossified, and not the rib itself, will probably be fractured, unless at the same time a coun-

ter force is applied to the dorsal extremity of the arch. How is it that this fracture has not been recognized during life? I would refer to a specimen of fractured first rib, shown before the Midland Medical Society by Mr. A. F. Messiter last session, which may elucidate this question. It was taken *post mortem* from a man who had been run over, several of his ribs on the right side being broken and the lung perforated. The clavicle was intact. Death took place soon after his admission into hospital. There was an almost transverse fracture through the middle of the rib, but the periosteum on one surface was intact, and would have prevented any displacement. Now, Mr. Lane has shown from his numerous experiments on the cadaver that these fractures are usually incomplete, so that I think we may fairly conclude that displacement is the exception and not the rule. In the absence of displacement the symptoms can be but slight, possibly not sufficiently urgent to cause the patient to seek surgical advice. There will be localized pain, varying with the extent of the injury, sometimes vaguely referred to the shoulders, perhaps only felt on certain movements of the shoulder girdle, raising the arm, lifting a weight, etc., but always determinable and definitely localized by careful manipulation, especially in the supra-clavicular fossa. In the more severe cases, and when the fracture is complete, pain will be felt in addition during ordinary or deep respiration, on coughing, and on putting the scalene muscles into action.

Crepitus may also be obtained, when the fracture is complete and through the anterior half of the rib, by fixing the cartilage as far as possible and moving the rib in the supra-clavicular fossa. Any injury to the lung or pleura will, of course, exhibit the symptoms usual in such injuries. The subclavian and axillary vessels have hitherto escaped implication. The diagnosis must be made from contusions of the shoulder, scapula, and clavicle; they are often co-existent, and may mark the rib injury in the slighter cases. The treatment I have employed in the few cases that have been under my care is to bandage the arm, as in fractured clavicle, thereby preventing movement, removing the weight of the arm and elevating the clavicle, and in a complete fracture through the anterior half, well padding the supra- and infra-clavicular hollows.

In a previous paper I recorded one undoubted case of complete fracture of the right first rib alone, evidently caused by force transmitted through the clavicle; the symptoms were those described above, and crepitus was plainly felt; in fact, the diagnosis was mainly due to discovering this crepitus whilst manipulating the shoulder and clavicle. Two other cases were referred to in that paper, both, I believe, caused by force transmitted through the clavicle. In both instances other ribs were broken. One was a woman who fell down a flight of stairs, finally pitching on to her left shoulder; two or three lower left ribs were broken, and there was every symptom of an incomplete fracture of the first left rib without displacement. The other was a man who had been knocked down and severely kicked, two of his lower true ribs being fractured, and on the same side the physical signs of fractured first rib. One other instance also came under my notice, which is doubly interesting. It illustrates not only a fracture of the first rib alone posteriorly by direct violence, but the pressure effects of carrying a bulky weight on the shoulder. A man, aged sixty-one, was admitted July 2, 1887, with the following history: He was following his occupation of trusser of hay, when a large truss fell from a height, the edge of it striking him posteriorly at the junction of the neck and shoulder of the left side. Localized pain whenever he attempted to lift any thing caused him to apply for relief. Little or no pain was experienced when the arm was at rest. On examination, one was at once struck with the distance of the superior angle of the scapula from the cervical vertebræ on the left side compared with the other one. The man was in the habit of carrying large trusses of hay on this shoulder, with the arm raised to steady and support them. The bulky weight had caused an almost lateral curvature of the lower cervical and upper dorsal vertebræ, with a certain amount of vertical rotation; the raised position of the arm depressed the superior angle of the scapula, and the muscles from the scapula to the vertebræ were elongated; consequently the first rib posteriorly was unprotected by the scapula, and the hard board-like edge or corner of the heavy truss striking him in this very region had evidently produced an incomplete fracture of this rib. There was no marked contusion of the soft parts,

the pain was not superficial, and on careful manipulation could be localized just external to the tubercle of the first rib, and produced by pressure on this spot and by moving the rib in the supra-clavicular fossa or with the shoulder girdle. No crepitus could be distinguished.

These four cases occurred during the last six months I occupied the post of casualty surgeon to the Queen's Hospital; and, as the number of casualties coming under my notice in that time would be at least three thousand, the proportion is very much smaller than one would expect from the percentage of specimens obtained from Guy's Hospital dissecting-room. It is possible that one or two cases may have been overlooked; the number, however, is sufficiently large to bring the injury into the domain of practical surgery, and to show the necessity of a careful examination of the first costal arch in all cases of shoulder injury exhibiting only the symptom of pain.—*Lancet*, June 30, 1888.

Maizel (E. L.) on Modelling Clay in Mastitis.—In No. 21 of the *Vrach* the author claims to have employed modelling clay in mastitis with excellent results. The method of application is simple enough. The breast is first washed with a sponge and a piece of soft gauze applied to it. Another piece of gauze is then cut to the proper size, an aperture being made for the nipple, and an even layer of well-mixed clay, free from lumps, spread over it. This is then applied to the breast over the first piece of gauze, and secured by a bandage passing over the shoulder of the opposite side. The dressing is renewed night and morning. This kind of treatment is also applicable in distressing fulness of the breasts, when for any reason the patient cannot suckle the child. The secretion is arrested and the fulness and tenderness often disappear in the course of twenty-four hours.—*Lancet*, June 23, 1888.

Dercum (F. X.) on the Use of Aseptic Fresh Blood-Serum or Solution of Common Salt to Preserve Trephined Bone until Replaced.—Recently, while witnessing the operation of trephining, during which the disc of bone after having been separated from the cranium upward of thirty minutes was again replaced, it occurred to me that the precautions usually adopted for preserving the life of the bone when removed for so long a time, were hardly calculated to insure the desired end. Surely the wisdom of immersing the bone in distilled water, or, what is perhaps worse, bichloride solution, so long, is highly questionable. Certainly the risks of long-continued immersion would be lessened by the use of a liquid more or less resembling the normal fluids of the body. Would not fresh blood-serum, so handled as to be aseptic, be more likely to preserve the life of the bone? or, if the surgeon should object to this plan as being troublesome, why not use the three-quarters per cent. solution of common salt of the histologists? This could always be made of distilled water at very short notice.—*Polyclinic*, June, 1888.

Gersung on Transplantation of Nerve from Rabbit to Man.—The patient was a sufferer from neuromata, which followed a poisoned wound of the hand, and for which the nerves had been twice resected. A fresh neuroma developed and suffering finally became so severe that the patient wished to undergo another operation, in order to procure, at least, temporary relief. Accordingly the following operation was performed: On March 4th the patient was put under the influence of chloroform, and the neuroma, which was situated behind the volar carpal ligament, was excised, and the nerve cut through behind the neuroma. The peripheral nerve stumps of the two digital branches were then sought for. A rabbit was now killed, and as long a piece as possible of the sciatic nerve of the animal, with the two branches into which it became divided, was dissected from it (the animal still presenting voluntary contractions). The sciatic nerve was afterwards inserted into the space between the central stump of the median nerve and its digital branches; the central end of the sciatic nerve was sutured to the connective tissue which covered the median nerve, and the two branches were sutured to the digital branches of the median nerve; the portion of nerve, measuring about 6 centimetres, which was deficient was thus made up. After the operation severe pain persisted for some hours, but then entirely subsided. Healing took place by first intention. As two months have now elapsed since the date of operation and the pain has not returned, it may be hoped that the favorable result may become a permanent one. Sensibility, moreover, is becoming re-established in the part.—*Brit. Med. Jour.*, May 19, 1888.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital. CONDICT W. CUTLER, M.D., Instructor in Diseases of the Skin, Post-Graduate Medical School, New York.

VOL. V., NO. 30. July 26, 1888. WHOLE NO. 78.

CONTENTS.

	PAGE
Leading Article	353
Pathology	355
Medicine	359
Surgery	362

LEADING ARTICLE.

The Completion of the Life History of Filaria Sanguinis Hominis.[1]—It is interesting to note the long chain of inductive reasoning, combined with careful and laborious research, which has led to the unravelling of the complicated life history of the filaria sanguinis hominis. The discovery of bilharziac hæmaturia by Griesinger in Egypt, led Wucherer to search the urine of patients suffering from hæmaturia in Brazil, and it is just twenty years since he first saw the immature worm in the urine of these cases. Shortly afterwards the same parasite was independently discovered by the late Dr. T. R. Lewis in the blood of a patient in Calcutta, and to this acute observer is due the credit of establishing a connection between chyluria and the filaria. This observation led Dr. Manson to the surmise that the adult worm must establish itself in such cases in the larger lymphatic vessels, or even in the thoracic duct. Systematic search was consequently made; but it was not until 1876 that the adult was at length found by Dr. Bancroft, of Brisbane, who went a step further by suggesting that the mosquito was probably the intermediate host. This Dr. Manson proved to be correct by direct observation in 1877; the immature filaria is sucked up with the blood by the mosquito, which shortly resorts to water to deposit its eggs, and, having achieved this object of its existence, expires; not, however, before it has digested the greater number of the filariæ. A few, however, escape, and are set free by the dissolution of the mosquito. It has been supposed that the filaria passes the next stage of its existence in the water as a free nematode, but can only attain full sexual development by entering the human body; it is believed to accomplish this by penetrating the skin of bathers, and to attain sexual maturity in a short time within the body, the conjunction of the sexes taking place in the lymphatics. Lewis once obtained a fragment of a male which was closely coiled around the female; but the specimen described by Professor A. G. Bourne, of Madras, from a case of lymphoid scrotum, is the first found in a condition which permits the specific characters to be described. The chief point which now remains to be cleared up by observation is as to the manner in which the parasite enters the human body.

According to Bourne,[2] all specimens heretofore found have been imperfect and are stated by Cobbold to have all been females. This authority states in his book ("Parasites: a Treatise on the Entozoa of Men and Animals," 1879) that the male parasite is unknown. This was not, however, strictly correct, as Lewis in the paper (*Quarterly Journal of Microscopical Science*, 1879) referred to by Cobbold, states that he found a portion of two specimens: the one was about one inch and a half long, and belonged to a female from which the caudal extremity had been severed, while the other was a fragment of a male worm. Of this latter he says: "It measured half an inch in length, and $\frac{1}{180}$ of an inch transversely; it was thinner than the

[1] *Br. Med. Jour.*, May 19, 1888.

[2] *Ibid.*

female, but of considerably firmer texture —so firm, indeed, that whilst endeavoring to make out its anatomy a considerable portion of it was lost by one of the needles used for dissecting snapping, and carrying a portion of the worm along with it. On tearing the helminth across, the severed surface does not present a ragged edge, but an even outline. The male manifested also a great tendency to coil, and it was only with difficulty that it could be separated from the specimen of the female parasite, around a portion of which it had twisted itself. It is unfortunate that its caudal end, especially, could not be found, as the definite decision of the genus to which it should be referred depends in a great measure on the characters which the posterior end of the male worm presents."

Brigade-Surgeon Sibthorpe has had several cases of filarial disease in the General Hospital at Madras, and has always made a search for the adult worm; this has hitherto proved fruitless. Recently, however, after an amputation of a lymphoid scrotum, he found two worms, which he had mounted and identified as adult filariæ. He had found embryo filariæ swarming in the patient's blood on the previous evening. He very kindly sent these specimens to me for examination, and I found that one was a female, while the other was a male. The female specimen agrees very closely with Cobbold's figure, but the vagina is everted or protruded. Dr. Smyth, resident surgeon to the hospital, who mounted the specimens, tells me that the eversion took place during mounting; it is probably a normal act during life. The caudal portion is wanting. The male specimen is about an inch and a quarter long; the anterior extremity is wanting, but the caudal portion is intact, and presents two spicules. The structure of these spicules will, doubtless, form a valuable specific character. Unfortunately, only one of these spicules remains *in situ;* the other has dropped out in the mounting, and lies nearly isolated on the slide. The spicule is broad at its proximal extremity, and gradually tapers until it becomes capillary in character. About half-way down there is a lateral prominence, and when *in situ* the spicule is folded on itself so that this prominence forms the actual free extremity of the spicule, while the broad end and the capillary end lie near to one another.

It is interesting to note that in this case, as in Lewis' case, the male and female were found in close contiguity.

Dr. Myers has published in the "Medical Reports of the Chinese Imperial Customs" a valuable and interesting paper[1] on this subject in which he discusses principally the question, What becomes of the filariæ in the blood? and again, Why are they only found in the blood at night? If Manson's calculation of the daily produce of the minute *filaria corvi torquati* be near the mark, the daily produce of the *filaria sanguinis hominis* will be close on two millions. They do not rest in the organs, for both Manson and Myers have found that they are not present in blood aspirated from the spleen. Myers further aspirated the liver several times with the same negative results. Continuing the investigation he has been led to the supposition that the absence of oxygen is the cause of embryo mortality. In support of this hypothesis, he relates a number of experiments in which the embryos were exposed to the influence of arterial and venous blood. In a drop of blood drawn from the basilic vein, with eight embryos on a slide, the filariæ were found not to show the same vigor as those in blood drawn by a prick from the finger. By the third day none were to be seen on the slide. Those extracted in the usual way from the finger, besides being much brisker from the first, and preserving their vitality much longer, had not all disappeared from the slide till the morning of the ninth day.

In this desire for oxygen on the part of the filaria is to be found (so Dr. Myers suggests) the cause of the periodicity of their appearance in the circulation. Quoting the authority of physiologists as to the fact that the amount of the absorbed oxygen discharged during the night is as 58 to 175 of that eliminated as carbonic acid in the day for a young man undergoing ordinary labor, he infers that the blood must be markedly richer in free oxygen at night than during the day.

The marked difference between the condition of that fluid when favorable for the development of filariæ and its state when hostile to their existence, seems due either to the presence of an excessive amount of carbonic acid or to the absence of a sufficient quantity of free oxygen. The former necessarily involves the latter, and

[1] Quoted by *Br. Med. Jour.*, June 25, 1887.

experiments seem to show (*a*) that direct contact of carbonic acid in presence of excess of oxygen is not, immediately at least, injurious; that (*b*) exclusion of oxygen, either directly or by surrounding the blood with carbonic acid, brings about the destruction of the parasites; and that (*c*) the behavior of the filial embryo, both in the human blood and when contained in the mosquito, indicates a desire for this gas. Consequently it is assumed that not improbably the presence of oxygen is essential to further development, and its withdrawal or diminution in quantity conducive to death. It is also to this larger proportion of oxygen in the blood exciting the vitality of the filariæ that Dr. Myers attributes their presence in the peripheral circulation during the night.

PATHOLOGY.

Méry (H.) on Scarlatinal Nephritis; Perforation of the Intestine from Uræmic Ulceration and Peritonitis.—The patient was a vigorous man of twenty years, who entered the hospital to be treated for a burn of the leg. While in the hospital he contracted a scarlet-fever which seemed mild, although reddish urine was passed fifteen days after the disappearance of the eruption. The general condition was very good, and both tonsils were cut off, the operation being followed by a rather abundant hemorrhage for three hours.

Two weeks after dismissal from the hospital an acute nephritis developed, manifested by failure of strength, nausea, vomiting, nocturnal dyspnœa, renal pains, frequent and scanty micturition, and headache. Later the headache became very severe, a slight fever developed, and the urine became bloody. The lumbar pains and dyspnœa continued, and sibilant and sonorous râles could be heard over the chest. The patient became agitated during the day and delirious at night. The bowels become loose, and all evacuations of fæces and urine became involuntary. Under cold baths and enemas, bleeding, and careful diet, some improvement ensued, but about ten days after admission to the hospital the patient complained of an extremely acute pain in the right iliac fossa, and became collapsed. Peritonitis developed, and death followed in two weeks.

A post-mortem examination revealed an acute, general peritonitis, due to the escape of intestinal contents through a large perforating ulcer of the ileum situated above three inches above the cæcum. Some of the solitary follicles of the small intestine were ulcerated, and many enlarged.

The cæcum was congested, but not ulcerated. The kidneys were large, congested, and on microscopic examination, seen to be the seat of intra-glomerular hemorrhages and epithelial changes.—*La France Médicale*, June 23, 1888.

Clark (J. E.) on Sterility from Gonorrhœa and Gonorrhœal Peritonitis.[1]—The conclusion of Dr. Goodell, logical though it may be, is not borne out by experience, and women go on as of yore, contracting gonorrhœas, bearing children, and, I am firmly of the belief, conceiving during the progress of the sequelæ and even after the more acute symptoms of a gonorrhœa subside. I have attended two cases of gonorrhœa in women, both newly married, and was positive my diagnosis was correct.

I treated the husbands for same disease before marriage, and attended the accouchement of one eleven months and one sixteen months after. The husband of the one whose parturition occurred sixteen months after marriage, had a discharge resembling gleet for some time after impregnation must have taken place, and the question very naturally presents itself, can a person suffering from gonorrhœa impregnate a healthy woman.

This opens quite an interesting field for investigation and suggests pertinent inquiries:

1st. Is gonorrhœal virus fatal to spermatoza?

2d. Is the gleety secretion identical with that of gonorrhœa?

An opportunity offered to obtain some sperm from a man suffering from gonorrhœa in a rather subacute stage, and a microscopic examination showed the majority of the spermatoza in a moribund condition; many were dead, and those living were evidently in a state of "innocuous desuetude." From the extreme enervation exhibited by the comparatively few living sperm, I feel that I am justified in assuming that in acute gonorrhœa the discharges are fatal to sperm viability.

[1] See MEDICAL ANALECTIC, 1887, p. 241.

A mixture of these two secretions on a microscope slide, under the most favorable conditions of temperature for sperm vitality, showed a complete collapse of every germ. In cases of gleet which I have examined, I have found living sperm in abundance. In the seminal discharge from a gleety patient, experiments conducted on a microscope slide, similar to those before mentioned—but with the gleety discharge,—did not show the vitality of the zoösperms to be seriously affected.

If these experiments prove any thing, it must be admitted that they show a distinction between the two discharges, whatever it may be, and that they are not identical, besides showing the possibility of impregnation where the male is suffering from a chronic gonorrhœa.

As to the sequelæ of gonorrhœa. My lot has been cast in a portion of the city where to obtain an inoculation of the pure, unadulterated virus is a matter of extreme facility, and as a result of this fact the opportunities to study the complications in all their protean diversity is unrivalled. I wish, however, to call attention to an affection, the cause of which, I believe, is often overlooked, or attributed to some other condition. I refer to gonorrhœal peritonitis, which I believe to be a much more frequent concomitant of this disease than it is credited with, especially among women.

I have frequently been unable to account for cases arising in my practice, their origin was so obscure and history so unsatisfactory. That it was the acute variety I was satisfied, but no history of trauma or other complications to account for it could be obtained. I have had the fever, the pain, tenderness, tympanitis, vomiting, prostration, in fact every symptom to treat, while the cause has remained obscure.

Eighteen months ago I was called to a woman suffering from an acute attack of gonorrhœa, the result of a "Happy New Year" on the part of the husband. I treated her *secundum artem* and was pleased to find success crowning my efforts. In just six weeks, however, I had a characteristic case of peritonitis on hand, which, to my surprise, the patient—a very intelligent woman—herself attributed to the gonorrhœa. She said she knew it, because she had felt "a hot streak up the groin." After a careful consideration of the case, I was compelled to agree with my patient. Since this time I have met with two other cases, both in females, one of whom I treated myself for clap; in the other the diagnosis was obtained, first by exclusion and afterwards confirmed by the patient.

In conclusion let me advise against accepting the term "idiopathic" as satisfactory in the explanation of obscure cases of peritonitis, at least not until after a searching inquiry has been made into venereal secrets, which I am assured will furnish valuable clues to elucidate otherwise obscure causes.—*Med. Age*, July 10, 1888.

Michie on a Case of Abdominal Abscess Following Enteric Fever.—The patient complained of pain and tenderness a little to the left and below the umbilicus during the fourth week of enteric fever. Towards the end of the seventh week there appeared a hard and tender lump in the same situation; the patient had shiverings and night sweats. At the end of the tenth week Dr. Michie saw the case in consultation. At that time the swelling was about twice the size of a cocoa-nut, hard, slightly tender, movable; there was no discoloration of the skin. No fluctuation could be made out; there was nothing unusual in the pelvis, temperature 100° F., pulse slightly accelerated. The diagnosis was: "Abdominal abscess, having its origin in a suppurating gland of the mesentery." On February 1st abdominal section was performed, the abscess opened and washed out with plain warm water, and a large rubber drainage-tube inserted. The patient was dismissed on the twenty-first day after operation, all discharge having ceased and the wound healed. Dr. Michie attributed the speedy progress of the case to (1) the equable intra-abdominal pressure, (2) the large-sized drainage-tube, (3) the absence of any washing or syringing out of the cavity after the first time. He deprecated this practice in the treatment of abscesses or wounds generally.—*Brit. Med. Jour.*, June 30, 1888.

Bark on Urachal Fistula and Abscess; Recovery.—A bricklayer, aged thirty-nine years, was admitted into hospital on September 7, 1887. About three months before this he first noticed a lump below the navel, which burst about three weeks before his admission. Had syphilis about twenty years ago, and has now iritis. Leucomatous patches on the tongue, and mucous patches in the throat. Has had much difficulty in making water for years.

The patient is rather pale and emaciated, has scars over the trochanters, and altogether presents a very miserable appearance. At the lower border of the umbilicus is the opening of a fistulous passage, from which urine containing much pus exudes. Below this a prominence appears, which is distinctly fluctuating, and evidently an abscess cavity. A No. 4 French bougie passes into the bladder with difficulty, owing to a hard cartilaginous stricture at the region of the bulb. On September 30th, the patient being under chloroform, the cavity was laid open from the umbilicus almost to the pubes, and was found to have the following boundaries: In front, the abdominal parieties; posteriorly, the anterior surface of the bladder; and below, the reflection of the peritoneum from this to the anterior abdominal wall; and was completely shut off from the peritoneal cavity. Cystotomy was then performed, in order that all urine should drain freely from the bladder. The cavity, which would contain about eight ounces of pus, was then scraped, dusted with iodoform, a drainage tube inserted, the edges brought together, both by sutures and strapping, and covered with carbolic lint and gauze. The patient did very well, the wound granulating up nicely. No rise of temperature of any moment, or other unpleasant symptoms, until November 24, 1887, when, the wound having diminished very much in size, he was allowed to sit up in an arm-chair for a short time. The foolish fellow, the nurse being out of the ward, got up and did a step dance, with the result that about four feet of small intestine prolapsed through the upper end of the granulating surface into his shirt. The house surgeon having washed and returned the intestine, the abdomen was strapped, so as to firmly close the wound, and a flannel binder tightly applied. Opium was freely administered, and some brandy. The patient was not at all collapsed or anxious, merely observing: "Well, I suppose this will keep me in bed a few days longer." His temperature never rose, and his pulse was never more than 120. An enema was given him, and his bowels acted seven days after the prolapse. On November 2d the patient was put under chloroform, the edges of the wound pared, and an attempt made to unite them; but a few days later the stitches gave way, and left matters much the same. From that time the patient has steadily improved. The stricture gradually dilated, until at the present time No. 20 French bougie passes easily. The perineal wound has closed, all urine coming per urethram. The wound in the abdominal wall firmly healed, and the man's general appearance is altogether changed. From a wretched specimen of misery and emaciation, he is now in good condition, and fairly healthy-looking.—*Provincial Medical Journal*, July 2, 1888.

Foulerton (A. G. R.) on a Form of Umbilical Sinus Occurring in Adults.—Umbilical fistulæ of greater or less extent depending upon non-coalescence of the urachus or omphalo-mesenteric duct are described. So also a fistula leading down to an abscess cavity within the abdomen, usually seen in children and often in connection with diseased mesenteric glands. Biliary and fæcal fistulæ may in like manner find their point of discharge at the same spot. The sinus now under consideration, however, does not extend deeper than the abdominal walls; it is merely the normal umbilical depression converted into a suppurating cavity. Its chief clinical characteristic has been a marked obduracy to treatment, depending probably on the fact that its exact pathology has not been understood. The cause of the irritation in four cases of this complaint, all occurring in women, which have come under my notice, has been the same—viz., retained sebaceous matter. The presence of a hard plug of mingled dirt and sebaceous matter can frequently be demonstrated in the umbilicus, especially in persons who give not due regard to personal cleanliness. It will vary in size from a hemispherical mass the size of a small split-pea, lying deep down in the umbilicus, to a larger concretion filling the whole depression, and presenting itself as a black disc, its upper surface being flush with the surrounding skin. This being so, it is easy to conceive that such a plug may set up considerable irritation, and the suppuration so induced is likely to continue until the cause has been removed. Bearing this in mind, the treatment is simple. The cavity should first be thoroughly scraped out, particular attention being paid to the deeper parts; the application of nitric acid will then ensure a healthy granulating surface. For the scraping, a most convenient scoop may be extemporized by

inverting a pen-nib in its holder. The cases thus treated have all healed rapidly after having already resisted various other methods. In one of the cases, after application of nitric acid, the sinus still refused to heal. It was then found that what had been mistaken for a large granulation at the bottom of the sinus was in reality an encapsulated mass of sebaceous matter, presumably an obstructed follicle. On this being turned out, the whole thing was well within a week. There is yet another form of umbilical sinus, caused by the spreading downward of eczema, but as to the treatment of this I have no experience. —*Lancet*, July 7, 1888.

Troup (F.) on the Diagnosis of Early Phthisis by the Microscope.—While entertaining the most abiding conviction that Koch's bacilli are always present in tubercular processes, and hence that their demonstration is of great diagnostic value, the author asks himself :

Has the number or size, etc., of the bacilli in sputum any demonstrable connection with the probable course of the phthisis? With the sole exception of the constant appearance of swarms of beaded bacilli, I would say, most decidedly, No. Prognostically we are in no better position with the bacilli than without them. The prognosis even of a tubercular process depends on many other factors than the number of bacilli,—the amount of fever, for instance, the sweats and diarrhœas and cachexia, and the intensity of the destructive process in the lung, as measured by the amount of elastic fibre shredded off.

Prior to the discovery of the tubercle bacillus, great reliance was placed on the presence of elastic fibres in the sputum as evidence of phthisis ; they were considered pathognomonic of the disease, and even now I do not consider this view to be a very highly exaggerated one. In no case of phthisis will they be missed if sought for with sufficient patience. They are to be found very early in the disease, and in the most innocent-looking sputum. They will be discovered before stethoscopic or percussion sounds, even when listened to by skilled ears and interpreted by skilled brains, give any other than uncertain information as to what is going on. That they precede the bacillus, mayhap for a considerable time, as daily examination of the expectoration of more than one early case has taught me, I can affirm with confidence. Therefore their diagnostic value is of a very high order, and should not be disparaged in favor of the tubercle bacillus, to which I do not think a first place should be conceded. The bacillus may be absent temporarily, not so the elastic tissue, which may be detected abundantly where bacilli are extremely few in number. For its discovery no elaborate microscopical appliances are necessary—a power of 150, or even 80 diameters is amply sufficient, and, when seen, the evidence of lung disintegration is unassailable.

It has been said that, unless the tissue has an alveolar arrangement, much stress need not be laid on its appearance in expectoration. This is a great mistake. In some cases of undoubted pulmonary phthisis, this alveolar arrangement is very well seen, and in others the fibres are straight and, in thick fasciculi, totally destitute of alveolation. No preparatory treatment of the sputum is needed for their demonstration. One, after a little experience, is able to select the dirty-white or reddish-yellow particles in which the fibres are likely to be found. A little morsel is pressed between the slide and cover-glass, and the examination proceeded with ; or a drop of a thirty per cent. solution of caustic potass may be first added. As the fibres are not very compressible, they glide to the edge of the cover-glass, and will probably be seen there in greatest abundance. Different from the bacillus, it is not easy, to one accustomed to microscopic work, to mistake these fibres, or to confound other things with them. One cannot say of tissue, however, that it is only present in the spit of phthisis —other destructive changes in the lungs cause its appearance ; but, if seen, the supposition is strong that this is the disease with which we have to do, and the supplementary search for the tubercle bacillus will complete the diagnosis. It is also as strongly resistant to putrefaction as the bacillus, and I have easily found both in a sputum sent from the antipodes. Fenwick's plan of boiling with soda and dilution with water gives in the sediment a sort of epitome of the quantity of tissue contained in any sputum.

In earnestly urging the importance of searching for elastic fibre in the very early stages of phthisis, and in all cases where such suspicion is entertained, I may have unduly magnified its diagnostic position, and may have failed to rehabilitate and re-

store its discovery to its former, and, as I believe, proper diagnostic rank. Many may dissent from my views; of course, one man's experience, however extensive it may be, is not all experience; but I can truly say that the microscope, by revealing to me the presence of early fibre in a sputum, has, on not a few occasions, enabled me to know that a phthisis had begun when, had I trusted to my ears alone, nothing so grave and serious would have been apprehended; and conversely, to assert with well-founded confidence that other cases were non-phthisical whose signs and symptoms pointed strongly to a contrary verdict.—*Edinburgh Med. Jour.*, July, 1888.

Vaillard and Pitres on Neuritis Produced by the Contact of Pure or Diluted Alcohol with Living Nerves.—The injection of eight drops of methylic or ethylic alcohol in the neighborhood of the sciatic nerve in the guinea-pig is immediately followed by sensory and motor paralysis of the corresponding limb and various trophic disturbances, œdema, ulceration and falling of the nails.

The first day the nerve is anatomically unchanged; the second the myelin becomes opaque, the nuclei fade away and are hard to stain, and the nerve so altered is dead. From the tenth to the thirtieth day disintegration is progressive. After the fortieth day regeneration commences. This destructive action is lessened as the alcohol is diluted, and does not occur with 15 per cent. alcohol. *Gaz. hebd. des sci. méd. de Montpellier*, June 30, 1888.

Coats (J.) on Fat-Embolism of Lung Following a Simple Fracture.—Fat-embolism is not uncommon in cases where extensive laceration of fatty tissue has occurred. It is most commonly met with in simple fractures of bones, but also in wounds or operations in which adipose tissue has been extensively cut or torn. The fat gets into the open mouths of the veins or lymphatics, and in either case it ultimately reaches the lungs. It does not generally produce any gross lesion there, but it may lead to hemorrhage, just as a larger embolism leads to the hemorrhagic infarction.

In the case under consideration, a comminuted fracture of the femur occurred about thirty-six hours before death. The patient complained of his abdomen, but after death no lesion was found there except an old cystic condition of the kidneys (simple cysts). Dyspnœa was present throughout, and became very urgent during the last day. The lungs were full of crepitant râles.

The muscles about the fracture were greatly lacerated, and the upper part of the shaft was splintered into four separate fragments. Between and around the fragments there was a large amount of yellow fatty matter which had apparently come from the bone marrow. This suggested an examination of the lungs for fat-embolism, which was done in the fresh state by freezing and making sections with the microtome.

In a section made in the fresh state, and mounted in solution of acetate of potash, it is seen that many small arteries and capillaries contain clear, colorless oil. In some cases an artery is seen filled with oil, which extends into its branches.

In other specimens made after hardening in Müller's fluid, and staining with osmic acid, the fat is seen to be of a deep black color, and it occupies the arteries and capillaries. Every section made showed a large number of vessels plugged with oil, so that the obstruction to the circulation must have been very considerable.—*Glasgow Med. Jour.*, May, 1888.

MEDICINE.

Gairdner (W. T.) on a Peculiar Neurosis Allied to Chorea.—An assistant timekeeper, æt. 33, is the subject of a kind of clonic spasm, or "insanity of the muscles," resembling *chorea* as regards the individual irregular movements, in respect that they are altogether non-rhythmic, and, as it were, out of all reckoning as to order and sequence; but, on the other hand, so far from affecting, as chorea commonly does, those actions most which are normally the *most* volitional and the most highly differentiated, it is in fact the opposite class that is here usually the most involved in the disease. Thus, he can carry a full glass to his mouth with either hand, and without any notable disturbance; he can walk perfectly well, can write in a good ordinary hand, which shows almost no traces even of tremor. When he is at rest in the recumbent posture there are times when it might appear as if nothing were wrong; but if he is caused even to speak,

or to make any kind of movement when in the position of dorsal decubitus, spasms come on, more or less, *but not necessarily*, or even chiefly, in those muscular groups which are thus called into voluntary action.

Spasms occur in many parts of the trunk of the body and neck—*e. g.*, the *rectus abdominis*, especially the left and the upper part; the *platysma*, and probably some of the deeper muscles in the same situation; the muscles which act upon the larynx and trachea *from without*, but *not at all* the internal muscles of the larynx; the facial muscles (grimacing spasm in a mild degree); the muscles of respiration, to the degree *only* of giving rise to slight irregularities, often attended by involuntary emission of sounds, but *not* any asthmatic or other serious embarrassment; the muscles of speech, to the extent *only* of just perceptibly affecting his articulation, but never of making him at all unintelligible.

The vesical and alvine evacuations are normal; so are mastication and deglutition.

The knee-jerk may be taken as normal. The other reflexes have not been investigated.

The disease appears to be wholly unaccompanied by pain or fever; but the patient has noticed flushing of the face at times. This used to more frequent than it is now. The general health is good, and has always been so.

The disease has persisted, more or less, for ten or twelve years; it was *first* observed in the facial muscles, and does not appear to have been of very sudden origin. No cause can be assigned, unless it were his having got a knock on the top of his head from jumping up in an entry. He has never had venereal disease. The remedies he has had hitherto have been chiefly these, so far as he knows: 1. Arsenic (Fowler's solution) in full doses, and for a long time. 2. Nux vomica, also for a long time. 3. Eaton's syrup, (a syrup of iron, quinia, and strychnia). 4. Fellows' syrup (one bottle). 5. Belladonna (which did not agree). 6. Indian hemp. 7. Phosphide of zinc. 8. Sulphate of zinc and extract of conium, together, which he thinks has checked the spasms more than the other remedies, and he has accordingly taken it in large quantities. 9. Continuous current, which he thinks did no good. 10. Blisters on back of neck, and iodine painting. 11. Cold-water compresses to spine. —*Glasgow Med. Jour.*, June, 1888.

Berger on Ocular Troubles in Tabes Dorsalis.—A lowered intra-ocular tension of variable amount, according to the author, is often noticed in the paralytic period, but is more marked in the preataxic stage. He also has noticed a paralysis of the unstriped muscular fibres of the eyelids, which has been progressive from the preataxic to the paralytic period. With this often comes a slight narrowing of the palpebral fissure, and in a certain number of cases there co-exists a myosis. An elliptical pupil is very common, the long diameter being directed inwards and upwards symmetrically on both sides.

The co-existence of myosis, lowered intra-ocular tension, and narrowing of the palpebral fissure remind one of analogous symptoms which are seen after section of the great sympathetic, and demonstrate that this nerve plays a rôle in the production of certain ocular symptoms in tabes.—*Gaz. hebd. des sci méd. de Montpellier*, June 23, 1888.

Peterson (F.) on Some of the Principles of Craniometry.—As a result of the author's investigations the following general statements may be made: Zuckerkandl's measurements of 127 insane skulls demonstrated atypical variations in 103, or more than eighty-one per cent. Bordier found that fifty-eight per cent. of a number of skulls of murderers presented abnormalities of construction.

A skull below the normal type in volume belongs to an abnormal individual.

Under-typical measurements of the head should always lead us to entertain the suspicion of defective cerebration.

Abnormal smallness of any part of the skull permits the conclusion that the part of the brain in its neighborhood is imperfectly developed.

Excessive development of the head has a double signification. It is always pathological, but may mean abnormality of brain or successful compensation. Wormian bones are also doubly significant. They either represent a pathological process or a successful effort of nature in repair.

Hemiplegia spastica infantilis, epilepsy, and intellectual or ethic weakness often exhibit unilateral aplasia of the skull.

The skull is representative of the brain only during the years of its development, and it must be remembered that psychopathic deterioration often has its inception subsequent to the completion of the process,

when no impression can be made upon its bony walls.—*Med. Record*, June 23, 1888.

Sudden Accessions of High Temperature in Children.—In a letter to the *Br. Med. Jour.*, June 9, 1888, Dr. Joseph Smith writes: "I was called in to see a male child, aged 16 months, at 10 A. M., and found my little patient with swollen gums, which I lanced. I prescribed calomel gr. ij, as the bowels were constipated, and a little saline mixture. The temperature was 101.5°. There was a little cough; but on carefully examining the lungs the physical signs were almost *nil*. At 6 P.M. I was informed that the calomel had acted twice; but as the child looked worse I again examined its lungs, and found the physical signs in the same condition as on my first visit.

"Upon taking the temperature, my thermometer recorded 110°. Thinking the thermometer was at fault, I compared it with the others, and found the record correct. Upon visiting the child again at 10 P.M., the thermometer registered 102°. In two days the child was comparatively well and the temperature normal."

To the same journal, June 30, 1888, Dr. Albert Kisch writes: "On May 7, 1887, I received an urgent summons at 9 A.M. to see C. L., a dark, bright-eyed, healthy-looking girl, aged 12. She had not yet menstruated. I found her in bed, apparently well; pulse 72; temperature in mouth, 99°. The father explained to me that he made a practice of taking the temperature of his children with a clinical thermometer on all occasions of illness, and as the child had complained of headache and some general discomfort shortly after waking, he placed his thermometer in her mouth, and found that it registered at 8 A.M. 105°. At 8.40 A.M. she seemed more uncomfortable, and, being unable to keep the bulb of the thermometer in her mouth in consequence of a rigor, he placed it in the rectum, and found that it registered 110°. When I found, only twenty minutes later, that my thermometer only indicated 99° in the mouth, we concluded too hastily that my friend's thermometer must have been faulty; but while we were discussing this matter the child again felt uncomfortable; her pulse was then 144; she was pale, and said she felt more ill than ever previously. A slight shiver came on. I inserted the bulb of my thermometer into the rectum and found that it registered 110°. Five minutes later it still registered the same temperature, but ten minutes later it indicated 105°.

"At 5 P.M. the temperature was found to be 102.2°, and at 9.30 P.M. it was 99° both in mouth and anus, and the pulse was 84. She complained of occasional violent pains in the head, but neither pulse nor temperature was affected by them. The tongue was clean, and, but for the pains in the head and occasional slight rigors, she was fairly comfortable throughout the day. A dose of Gregory's powder administered after my first visit acted at about 7 P.M. At 10 P.M. she fell into a sound sleep, which continued with slight intermission till the morning, when pulse and temperature were normal, and she seemed to be quite well, and remained so.

I may add that the bowels had been regular, and that the urine was normal in all respects, and that, but for the fluctuations of temperature, there were no physical symptoms whatever."

Coles on Alternating Paralysis and Pregnancy.—The patient is about twenty-eight years of age: she has three children, the eldest being six years old. When her oldest child was eleven months old she found that her left foot commenced to drag when she walked, and it was not very long before she was paralyzed almost completely in her two lower limbs. There was partial paralysis of the bladder and rectum; there was partial paralysis of the vagina, so much so that you could put your fist into the vagina without any difficulty; it was perfectly relaxed. Finally she became pregnant again, and almost from the day she became pregnant she felt a great deal better; she felt that she was regaining the use of her limbs. As soon as the uterus rose out of the pelvis she could walk perfectly well, and enjoyed excellent health. After the birth of the second child she again lost the use of her limbs, and in this instance she suffered violent, aching pains in the calves of her legs, and pains occasionally shooting up to each hip, something like sciatica. She became pregnant a third time, and from the day she became pregnant she felt better again. As soon as she missed her menstrual period she felt better, she regained the use of her limbs. This time she had a miscarriage about the fourth or fifth months, and had a good deal of trouble, she had some cellulitis following this accident, which confined

her to her bed some time. She got over it, however, but suffered more or less weakness and pain in the lower limbs. She then became pregnant a fourth time, and the physician who had charge of the case, and who has been the family physician for the last four years, told her that as she was so much better during pregnancy that the best thing she could do was to get in that condition again, and, sure enough, in a few months she became pregnant. That child was carried to term. She had had two miscarriages and carried three children to term in the last six years. Her youngest child is about a year old now. She got along very well after the birth of her last child. During her pregnancy, and for eleven months subsequently, she regained the use of her limbs, and she has had perfect use of them until within the last six weeks, and now the paralysis is returning. She feels weak in both limbs, but especially in the left, which she cannot raise from the floor. She seems to be in perfect health otherwise, and an examination reveals only some subinvolution of the womb, and laceration of the cervix.—*St. Louis Cour. of Med.*, July, 1888.

SURGERY.

McArthur (L. L.) on a Fatal Case of Nerve-Stretching.—A patient was brought into the hospital suffering with sciatica, which he had endured for five or six years, in spite of every variety of treatment known to medical science, except stretching the nerve. He had had hypodermic injections of all kinds, blisters, internal medication, cathartics, rhuematic treatment—every thing that materia medica could suggest, and finally, as a last resort, it was recommended that he have the nerve stretched. He consented; proper preparations for the operation were made the night before, putting the patient in the best possible condition. At the operation the buttocks were shaved and scrubbed with a carbolized solution. A clean-cut incision was made over the course of the nerve, beginning at the margin of the gluteus maximus, the nerve was readily found, exposed and stretched, and the wound was sealed with the strictest antiseptic precautions. It was so simple and clean-cut a wound, and such careful precautions were taken to get primary union, that little or no doubt was anticipated as to the early and favorable healing of the wound. In fact, the patient was promised that he would do, as several other cases in the hospital had done before, probably have the wound healed up in four days, and at the end of a week be able to sit up. He was operated on at ten in the morning, and by six in the evening had a temperature of 101°, which rose during the night to 102½°, and in the morning was 103°. The next day it remained between 103° and 102½, being kept from rising higher probably by the influence of antipyrin. Evident sepsis being present, the wound was opened to its full extent. It had united partially by primary union; no pus was found in the wound, but the margin of the muscle had a gangrenous appearance. No drainage tube had been introduced into the wound, but what little drainage was necessary was provided for at the lower angle of the wound by two or three strands of catgut. After being opened the wound was washed out with 2½ per cent. solution of carbolic acid, and packed with iodoform gauze, which, moreover, had been rubbed in iodoform; still his temperature did not drop, and in another twenty-four hours the patient died from heart failure. To find the cause a post-mortem was made, and the gangrenous condition found in the wound extended up through the sciatic notch, and involved the obturator muscles and pyriformis. There was some thick, purulent material there.

Few cases of nerve-stretching have resulted fatally. The operation is usually considered a simple one, not at all dangerous, and it is important that the unsucessful ones be reported so they can serve as a guide. —*Western Medical Reporter*, June, 1888.

Perfect (H. H.) on a Case of Wound of the Liver and Lung.—On May 18th, as Captain S., aged forty-five, of Dublin Shore, was crossing a field near his home, with an axe in his right hand, he tripped and fell. The sharp blade of the axe penetrated his right side somewhat anteriorly at an angle of 30° or thereabouts to the axillary line, severing the eighth rib, wounding the lung slightly, and making a gash in the liver three inches and a half long and three quarters of an inch deep The bleeding from the liver was very profuse, but it ceased after three very fine sutures had been introduced. A portion of the omentum and the hepatic flexure of the colon protruded from the external opening, and, after the clotted blood had been

removed and the protruding viscera thoroughly cleansed, they were with difficulty kept within the abdominal wall while the wound in it was being stitched. The wound of the peritoneum was not closed separately, but by the silk that held the cut edges of the abdominal wall together. The temperature on the third and fourth days was 100°, but it never exceeded that point afterward. Capillary drainage was used, with gauze and carbolic-acid dressings. The stitches were removed on the eighth day. The only difficulty is that sneezing produces a "stitch in the side" at the lower border of the lung. There is weakness from loss of blood, as he was fourteen miles distant when I was telephoned for.—*N. Y. Med. Jour.*, June 30, 1888.

Morrison (R.) on Suprapubic Lithotomy on Patient in his Eightieth Year; Recovery.—M. W., æt. eighty next June. Complains of a constant pain in his bladder and penis, aggravated by passing water, which disturbs him so much at night that he can with difficulty get any rest.

For many years he has had occasional trouble with his bladder, which passed off after resting and simple medicines until this time. He has had six attacks of rheumatic fever, and has been always a nervous man. On examining the bladder, it is found to contain a rough calculus of considerable size. The urine is plentiful—sp. gr. 1004, contains one fourth albumen, and a large quantity of muco-pus. His feet and legs are considerably swollen, and breathing somewhat difficult. A mitral systolic murmur and some bronchial râles seem to be the cause of this. Considering the patient's great age, diseased condition, and previous history of recoveries from similar attacks, I decided meantime against operation. With milk diet, rest, and digitalis and iron, his general condition improved; but his bladder symptoms were not benefited by sedatives or washing out. After ten days of treatment it became evident to every one that his only chance lay in removing the stone, which he had anxiously wished for as soon as he knew it was there.

The operation was performed on 6th November, 1887. Chloroform was administered, and the bladder injected with 8 ozs. boracic lotion, which was retained by an assistant grasping the penis. The rectum was not distended. The abdominal wall over the bladder was divided in the linea alba, a long curved staff introduced into the bladder, and its point projected just above the pubic bone as a guide This was readily exposed and the bladder wall opened, each side of the incision being caught by artery forceps. A finger followed by lithotomy forceps was introduced, and the stone easily grasped and removed. A drainage tube was left in the bladder from the wound, and the abdominal incision brought together by sutures. The old gentleman was put to bed, apparently no worse for the operation.

The same evening his temperature was 100° In every other respect he was well. From this time his temperature never rose above normal. For the first week all went well. On the fifth day he was out of bed on a sofa. The urine all escaped by the open part of the wound and the tube. For some days the bowels had not acted well, and on the eighth day it was found necessary to clear his rectum of a fæcal mass. He was excited by this, and the following night slept little, wandering at times. Next day he developed delusions, thought his food was being poisoned, that his nurse and friends were plotting against his life, and would not take food from them. Notwithstanding this the wound steadily progressed, and on the twelfth day he passed some water per urethram. His delusions continued; but in a month the wound was healed, and he had no difficulty with his bladder. At the end of the fifth week he was sent from home for change of air and scene, and his mental symptoms soon disappeared. He is now happy and comfortable, without bladder trouble of any kind.

Remarks.—The stone measures in its longest circumference 4½ inches, shortest 3½ inches, and is of oxalate of lime coated with phosphates. Its size is a very satisfactory one for crushing, but my reasons for selecting the cutting operation were that—1, less time would be required for the operation, and less anæsthetic consequently given; and, 2, that in passing an instrument I found it generally hitched at the prostate, which would have added to the risk of frequent introductions of the lithotrites and evacuating catheters. I found the operation with the aid of the staff point to cut down upon very much simplified. Without such a guide the operation is slower and more difficult. Why it should not always be used I am at a loss to understand, though I have never seen it suggested. Dilatation of the rectum

in so old a man would surely be unsafe.—*Edinburgh Med. Jour.*, July, 1888.

Crawford (J.) on a Case of Accidental Castration.—On March 14, 1888, I was called at night several miles away in the country to arrest hemorrhage in a case of traumatic injury to the scrotum of a lad. On my arrival, I learned that the lad, while in the act of ascending a ladder, had been precipitated to the ground, and his scrotum, coming in contact with a stake which was driven into the ground near the foot of the ladder, was lacerated to the extent of about one inch and a half, the tear beginning at a point at the lower part of the raphe and extending obliquely upward and to the right over the right testicle, completely severing the excretory duct and other structures of the spermatic cord. The testicle was attached to the urethral portion of the cord only by a small filament of the tunica vaginalis. The septum of the scrotum had a small punctured wound in it, through which protruded a mass of apparently organized matter, which I at first mistook for the left testicle; but which I afterward learned, to my great pleasure, was composed principally of soot, salt, etc., which had been used locally for the purpose of forming a clot. The most singular feature about it was that a filament, extending a short distance through the punctured wound, similar to that attached to the right testis, was attached to this clotted mass, simulating a contused and lacerated testicle. As there was marked swelling and contusion of the parts, the left testis was not ascertained to be in situ and uninjured until the cavities were cleansed of the various débris, domestic styptics, clots, etc. The hemorrhage was readily checked, the edges of the wound were approximated and kept in position by sutures and adhesive plaster, and an antiseptic dressing soon brought about union by the first intention.—*Med. and Surg. Rep.*, July 14, 1888.

Irwin (B. J. D.) on Fracture of the Sternum, with Dislocation of the Fragments.[1]—While on duty at the United States Military Academy, in the summer of 1876, I was called in consultation by Dr. J. B. Monroe, of Highland Falls, near West Point, New York, to see a healthy, robust American, aged twenty-six years, who, while seated on top of an omnibus, was dragged by his unruly team through a low doorway of a carriage-house, his body being caught between the lintel and the driver's seat, and crushed violently backward and downward against the roof of the vehicle. As he was hurried forward toward the entrance he endeavored to escape the danger from above by stooping and leaning forward, but his body was caught by the lintel and violently crushed backward, his dorsal spine being pressed against the projecting comb of the seat, formed on the roof of the omnibus. At the same time the compression of the thorax fractured the sternum at the junction of the manubrium with the gladiolus, the lower end of the former being driven inward, while the upper extremity of the latter bone was pushed outward and upward upon the manubrium.

Attempts to return the fragments to their normal position having proved unsuccessful, a broad bandage had been applied for the purpose of lessening the intense pain caused by thoracic respiration.

Examination of the injured parts disclosed marked projection of the spinal column between the second and sixth dorsal vertebræ, but, although the appearance of the parts indicated fractured bone, careful manipulation failed to disclose crepitus.

Efforts were at once made to replace the fragments of the broken sternum, but, although they could be reduced to position by pressing the overlapping, projecting end of the gladiolus downward, it would slip out and upward on withdrawal of the direct pressure.

To overcome that tendency, a large, hard pad, covered with soft material, was placed between the scapulæ. While the patient inspired deeply and the head and shoulders were extended well back, the displaced fragments were returned and retained in their normal position by a suitable splint applied over the pad and across the spine; the expanded condition of the thorax being maintained by aid of a figure-eight bandage, which bound the shoulders back to the projecting ends of the transverse splint.

To allay pain, which was very severe during the two or three days following the reception of the injury, morphine and potassium bromide were administered from time to time, as occasion required.

The apparatus was worn without change for three weeks. Its use secured perfect reunion of the broken bone and complete restoration of the sternum to its natural condition.—*Med. News*, June 23, 1888.

[1] See MEDICAL ANALECTIC, 1888, p. 233.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital; CONDICT W. CUTLER, M.D., Instructor in Diseases of the Skin, Post-Graduate Medical School, New York.

VOL. V., NO. 31. August 2, 1888. WHOLE NO. 79.

CONTENTS.

	PAGE
Leading Article	365
Miscellaneous	370

LEADING ARTICLE.

The Toxic Effects of Cocaine.—In a former number,[1] attention was called to some of the medicinal uses of coca. A voluminous literature has extolled the beneficial, pain-relieving effects of the drug, while its untoward, toxic action has been belittled and by some denied. That it often produces alarming symptoms and sometimes death cannot be gainsaid, as several well-authenticated fatal cases are on record and doubtless many more have never been reported.

It seems to matter but little in what way the drug is given or in what dose, whether to young or old, robust or feeble; now and then toxic effects of the most distressing sort develop when least expected, and tax the fortitude and resources of the medical attendant to their utmost.

In general terms the toxic effects of cocaine are sensory, psychical, and circulatory, the two former groups of symptoms being alarming but not dangerous, while the symptoms arising from the circulatory disturbance are distressing beyond expression and betoken a pathological condition incompatible with safety. It is then by syncope that cocaine kills, and that, too, in subjects with presumably healthy hearts. In some cases a previous stoppage of respiration takes place.

According to Bignon,[2] cocaine is only poisonous indirectly, *i. e.*, when, as a consequence of the anuria, the accumulation of the toxic constituents of the urine attain dimensions sufficient to give rise to uræmia. Very few, if any, observers corroborate this theory. A condition of nervous instability without doubt predisposes to its toxic action, and in such cases nervous symptoms sometimes predominate, as the following cases, where tetanic seizures occurred, will show.

A man applied for treatment for hemorrhoids. One drachm of a four-per-cent. solution was injected. The author's own words are best used to describe an attack:[3]

"In about five minutes after the injection, and before I had taken any other step in the operation, he complained of strange feelings in his legs, accompanied by twitching of the muscles. In a few minutes more these twitchings amounted to decided general tetanic convulsive movements, which involved all the muscles of the trunk and extremities. By the time these convulsive movements had become general he complained of fulness in the head and soon became unconscious, remaining so for about five minutes. As the convulsive seizures gradually subsided, he regained his consciousness, but only gradually. For instance, would answer me, look bright, and said he felt all right, but in a few seconds more would complain of fulness in his head and become drowsy. This occurred several times before he recovered entirely. Altogether the attack lasted about half an hour. His pulse was weak, although it could not be felt well on account of the convulsive movements. Pupils slightly dilated. The following day found the patient doing very well, only complaining of some soreness in his muscles.

[1] MEDICAL ANALECTIC, 1888, p. 77.
[2] Quoted by *Lond. Med. Record*, Oct. 15, 1886.
[3] S. T. Earle in *Maryland Med. Jour.*, March 19, 1887.

"In the case reported in the *Maryland Medical Journal* for January 15, 1887, I injected a solution of the drug containing altogether about five grains of muriate of cocaine. In about fifteen minutes, without any premonitory symptoms, except a little nausea and faintness, she was seized with violent general convulsive movements, which were so strong, and so much more pronounced on the right side, on which she was lying, as to turn her over on her belly. She had opisthotonos, entire loss of consciousness for about five minutes, after which it gradually returned, and seemed entirely restored at the end of fifteen minutes. Asphyxia; muscles of the lower jaw violently convulsed; pupils unevenly dilated after consciousness began to return; mouth drawn to the right side; speech decidedly thickened for some minutes after her return to consciousness; respiration very labored, and at the height of the attack was arrested for some seconds; pulse very feeble; cutaneous surface decidedly blanched, where not purple, until after consciousness began to return, when it alternately became flushed and pallid; she now broke out into a profuse sweat. There was great prostration following the attack and a disposition to sleep. She recovered entirely after several hours, and only complained of feeling tired. This patient had never had any nervous attack previously, and both patients were remarkably robust and healthy"

In spite of many reported cases with seizures like these the drug is actually recommended[1] in the treatment of tetanus and strychnia poisoning.

A nervous woman of thirty was given three injections of a six-per-cent. solution for the extraction of carious teeth.[2] Symptoms: immediate syncope, dilated pupils, trismus, head drawn back, arms extended, hands clenched, feet extended and inverted, respiration 40, superficial and spasmodic, pulse 80, and hard. Ammonia by inhalation and mustard to extremities relieved symptoms, except trismus and insensibility. A second attack, with opisthotonos, came on. After a third, one half drachm each of fl. ext. lobelia and tr. assafœtida were given. One spasm after this, followed by a period of great relaxation and prostration.

Nervous phenomena sometimes take on an epileptic phase, as the following case shows:

Dr. Slayter[3] hypodermically injected fifteen minims of a 10-per-cent. solution of cocaine hydrochlorate into the toe of a patient previous to operation. In ten minutes the patient became cyanosed, and developed an epileptiform fit. This passed off after a few minutes, and the operation was proceeded with, but he remained dazed for a couple of hours, and suffered from pain and smarting in the eyes for twenty-four hours. He had never suffered from epilepsy.

Transitory manifestations of an hysterical nature are very common. At a recent meeting of the New York Obstetrical Society many members testified to the frequency of aggravated hysterical symptoms following the use of cocaine.[4]

Callaghan,[5] besides the common nervous disturbances from cocaine, has seen it produce a marked diminution in the acuity of the sense of smell, and a scarlatina-like rash, over the body.

Other special senses also suffer, as amaurosis, tinnitus, deafness, etc., are not unknown.

In a case where the ordinary prostration and syncope followed the use of cocaine in dentistry, Bock reports[6] that an examination of the eyes with the ophthalmoscope showed that the veins were normally full, the arteries rather thinner and paler than was natural, and the papilla of the optic nerve of the normal fulness. The inhalation of three drops of nitrite of amyl brought color into the face in a few minutes, and in six minutes another three drops having been inhaled, there was considerable flushing of the face and return of consciousness.

Psychical symptoms are common, and consist chiefly of varying degrees of delirium.

To facilitate the removal of a small epulis and a tooth from a young negro woman one half gr. cocaine was injected into the gum. Symptoms: wild staring look about eyes, with dilatation of the pupils, great restlessness; rapid, gasping,

[1] Bignon: *Lond. Med. Record*, Mar. 15, 1887; Lopez: *Lond. Med. Record*, May 16, 1887.

[2] R. H. Harrison, Jr., in Daniels' *Texas Med. Jour.*, June, 1888.

[3] *Brit. Med. Jour.*, Feb. 25, 1888.

[4] *Am. Jour. Obst.*, etc., March, 1888.

[5] *Lancet*, June, 1886, p. 1149.

[6] Quoted by *London Med. Record*, June 15, 1886.

irregular respiration; wild delirium and jactitation, coldness of extremities, and weak, rapid pulse. Dry heat was applied, and alcohol, ammonia, and ether given both by the mouth and hypodermically. Vomiting and collapse ensued. The collapse was recovered from, but delirium persisted for several hours, until sleep supervened.[1]

Inability to speak is often noticed, and though often called aphasia, it is in most cases due to stiffness and impaired sensibility of lips and tongue. In a woman of twenty the larynx was sprayed with 4-per-cent. solution to allow removal of small excrescence from left vocal cord.[2] Symptoms: pallor of lips and face, impending syncope, indistinct speech from stiffness of tongue, large lump in throat, complete numbness of lips (tested and found anæsthetic), and, for twenty-four hours, violent headache and nausea.

Woman, with acute coryza.—Four-per-cent. solution passed through nose on pledget of cotton.[3] Symptoms: pallor of lips and face, syncope, extinction of pulse, preceded by extreme rapidity and smallness, final cessation of visible respiration. Apparently dead for ten minutes; vomited repeatedly for an hour, and had headache and nausea for two days.

A healthy man of forty, with nasal polypi.[3]—A 5 per cent. cocaine solution introduced into nose on pledget of lint. Symptoms: constriction of throat, pallor, dyspnœa with stridulous respiration, and great nervous excitement. Relieved by inhalation of amyl nitrite.

A similar case of laryngeal spasm has been reported by Dr. H. Hall,[3] which he relieved by causing chloroform to be inhaled.

An imperative desire to evacuate the bowels has been noticed by Drs. F. H. Potter, F. W. Ring, and others.

Great cardiac excitement is often present, which is manifested by violent palpitation, and perhaps precordial pain.

One half grain was injected into the gum of an adult male.[4] A tooth was extracted without pain. In about four minutes vertigo and nausea; rapid, weak pulse; violent palpitation of the heart, dyspnœa, great pallor, dilated pupils, general tingling, staggering gait, and boisterous conduct.

In a woman with painful alveolar abscess, one half grain was injected. Relief from pain in two minutes. Symptoms: almost maniacal excitement, "strange" feeling in legs; pallor; feeble, rapid pulse; sighing respiration; general tingling; burning pain at stomach, clutching at the throat, eyes staring, with dilated pupils, cold perspiration of face, which was pale; and irregular palpitation. Hot alcoholic drinks and hot applications to extremities gave her relief; vomited and fell asleep. As a general thing, cardiac symptoms are those of weakness.

Three minims of a 12 per cent. solution were injected near a small tumor on the face of a healthy man of twenty-three.[5] Symptoms in thirty seconds; great depression, coldness and faintness, rapid cyanosis, with cold perspiration, respiration sighing, pulse weak and 140, with frequent short attacks of syncope. Stimulants and external heat were employed, after which mild delirium supervened.

In a boy of thirteen, one and a half grains of cocaine were injected for operation on abscess of the forehead.[6] Symptoms: in five minutes, pallor, restlessness, and hurried respiration and pulse. The heart's action became tumultuous and irregular, the pulse weak. The pupils were dilated. The patient was in great distress, tearing off his collar and shirt to expose his neck and chest. Ammonia by the mouth and dry heat externally gave relief, after nausea and vomiting had occurred.

An example of the commoner toxic effects of cocaine, the following cases may be cited:

A student had been experimenting on himself by hypodermatic injections of a four per cent. solution of cocaine at regular intervals during the day, but they were not followed by its toxic influence until some four hours after its last exhibition.[7] These were shown principally by irregularity of the circulation accompanied by cerebral excitement.

Patient's attacks came on in paroxysms whose onset were indicated by a steady, constant rise in the pulse, accompanied by tinnitus and a sensation as though the head would burst. Capillary circulation somewhat interfered with, the extremities being

[1] C. E. Gooding, in *Lancet*, Feb. 25, 1888.
[2] H. C. McSherry, in *Med. Register*, May 5, 1888.
[3] *Lancet*, Nov., 1885, p. 946.
[4] A. W. Adinsell, in *Lancet*, May 5, 1888.
[5] A. N. Blodgett, in *Bost. Med. and Surg. Jr.*, Sept. 22, 1887.
[6] Bernard Pitts, in *Lancet*, Dec. 24, 1887.
[7] F. P. Emerson, in *Med. News*, April 7, 1888.

colorless. At the height of the paroxysms, patient grasped the head between the hands and labored under intense excitement, lasting from thirty to sixty seconds, when there was a gradual decline in the pulse to normal (and sometimes below), and also of the cerebral symptoms, patient becoming quiet during the interim, which lasted from one to two minutes, when the same cycle of symptoms was repeated. Pupils and tactile sensibility normal; respiration not markedly interfered with except at the height of the paroxysms, when it became more superficial and hurried.

Amyl nitrite seemed clearly indicated, and was used by inhalation with immediate relief, followed in a short time by an entire disappearance of all untoward symptoms.

A dentist inserted cocaine in the gums of a strong young man.[1] The patient was bathed in a cold perspiration, his eyes glistening, yet the pupil was not dilated; complaining that he was blind, and that he would die, asking to be held. Pulse was much accelerated, feeble, soft, and compressible. Morphia subcutaneously had a good effect.

A colored woman was found on the floor in the dentist's office, complaining of being dizzy, unable to walk, of being sick, with vertigo, pulse slightly increased in frequency, not cold; somewhat excited, no perspiration. She recovered within two hours and without any remedy save the inhalation of ammonia.

In another case, morph. sulph. hypodermically, with the inhalation of aq. ammonia and nitrite of amyl, gave prompt relief.

A healthy middle-aged woman used freely in spray form a 2-per-cent. solution for "irritable throat and cough."[2] Symptoms: coldness and numbness of the tongue, weakness of the lower limbs and staggering, mental distress and great depression from the very first. Unconscious from 9 P. M. until 2 A. M., but she says that she had glimmerings of consciousness most of this time, although she could not articulate; thought there were strange objects in the room, and feared lest any one should speak to her. Great prostration followed, and it was some weeks before this lady regained her usual strength.

In a case of tonsillotomy in a man twenty-four, Dr. E. W. BULLOCK[3] used two drachms of a 4 per cent. solution as a spray and 40 minims as an injection to produce anæsthesia. Two hours later, severe headache, vertigo, burning in the stomach, and nausea came on, followed by tingling of the extremities, dryness and constriction of the throat. There was flushing of the face, dyspnœa, and delirium. The pupils were dilated, respirations 10–14, pulse 126 and weak. Alcohol and digitalis relieved the symptoms, and sleep ensued. The next day there were peripheral numbness and tingling, dryness of the throat, and blurred vision. This and the preceding case are remarkable and unique, because of the long interval between the administration of the drug and the onset of toxic symptoms.

Local disagreeable effects are not unknown.

Preparatory to an incision into a cyst of the hand, five drops of a 20 per cent. solution were injected.[4] In less than half an hour the finger began to swell, and in two hours the swelling was extreme, the finger appearing as if constricted by an elastic band. Systemic symptoms were not wanting, dizziness, headache, pallor of skin, nausea, and diarrhœa being present. Local inflammatory symptoms lasted four or five days.

In a healthy man of fifty with simple hypertrophy of the turbinated bones and septum nasi, a spray of a 20 % solution was used to simply facilitate examination.[5] In twelve hours there developed a severe and painful inflammation of the nose which lasted over a month.

Gangrene sometimes follows its hypodermic use, Dr. J. A. Nichols having seen such a result in two cases[6]: an amputation of the finger and a circumcision.

Dr. V. Zanchevski, of St. Petersburg, has published[7] some observations on the pathological changes found in the bodies of animals poisoned by cocaine. The experiments were made in two series. In the first series the animals (dogs) were given hypodermically a single lethal dose of cocaine—viz., 3 centigrammes per kilogramme of the weight. In the second series

[1] G. N. Monette, in *Jour. Am. Med. Assn.*, Oct. 22, 1887.
[2] F. Fox, in *Br. Med. Jour.*, Feb. 18, 1888.
[3] *Bost. Med. and Surg. Jour.*, June 16, 1887.
[4] J. W. Stickler in *Med. Record*, Mar. 19, 1887.
[5] R. O. Colter in *Atlanta Med. and Surg. Jour.*, July, 1888.
[6] *N. Y. Med. Jour.* Feb. 18, 1888.
[7] *Lancet*, May 26, 1888.

of dogs chronic poisoning was induced by the subcutaneous injection of a much smaller quantity—about a fifth part of the lethal dose was given every day for six days. A day was then missed, and during the next six days an increased dose given. Every seventh day was missed, and the dose gradually increased. Thus, dog No. 6, weighing 5650 grammes, was experimented on for seventy-three days. During each of the first six days 3 centig. were given; during the next six, 4 centig. For ten days 5 centig. were given, for thirteen days 6 centig., for eleven days 7 centig., and for the last eleven days 8 centig. The total quantity given was 3.35 grammes. One day in the week was always missed. At the beginning the immediate effect of the cocaine was seen in increased frequency of the cardiac beats and of the respiration, which, however, did not last more than a quarter of an hour. Afterwards great weakness of the legs came on, the animal remaining in a sitting posture and swaying its head to and fro. The pupils were dilated and sensation intact. In three hours the normal condition returned. When larger doses were given the disturbance was greater, the animal commencing to try to run about and the subsequent weakness lasting for a longer period. The general results obtained by observation of the animals during life and by post-mortem examination of the bodies showed that in acute poisoning the mode of death was asphyxia. In chronic cases without asphyxia there was a marked hyperæmic condition of the central nervous system, which presented a contrast to the state of the rest of the organs, which were anæmic. Albuminoid degeneration was especially marked in the ganglionic cells of the spinal cord and the nerve cells of the heart ganglia; it was present also, but in a less marked degree, in the muscular fibres of the heart, in the ganglionic cells of the medulla oblongata, and in the hepatic cells. In these last there was found an accumulation of glycogen. In chronic poisoning the degenerative processes were found to have advanced further in the cells of the spinal cord and medulla, minute cavities, atrophy, and hyaline degeneration being noted. In the heart there was fatty degeneration of the muscular tissue; in its nerve ganglia there were fatty degeneration, minute cavities, and simple atrophy, and in the liver atrophy of the hepatic cells was present. The vascular system was most affected in the spinal cord, there being cellular proliferation and hyaline degeneration of the coats. In the heart and liver and atrophic condition of the tissues was found, also a swelling of the endothelium of the capillaries of the cardiac ganglia.

The most recent fatal case is reported[1] by Dr. J. H. C. Simes.

A. M. was admitted into the surgical ward of the Episcopal Hospital on February 23, 1888. Age, twenty-nine years, English. He gave a history of having suffered from stricture of the urethra some years before, for which the operation of external urethrotomy had evidently been performed. At the time of admission there was some difficulty in passing water, and the urine, he said, "comes out of an opening between the legs." Upon examination there was found the cicatrix of a perineal section, having a small fistula communicating with the urethra. The urethra was examined, and the existence of a stricture was ascertained, situated about four and a half inches from the meatus. The stricture admitted a No. 11 French bougie.

Gradual dilatation, by means of sounds introduced every other day, was the treatment under which the patient was placed for two weeks. Favorable progress was made, and the urethra now easily admitted a No. 20 sound. Internal urethrotomy was determined upon, in order to remove all hindrance to the passage of urine through the urethra, and permit the healing of the perineal fistula. On March 3d, the day I had intended to perform the operation, the patient complained of sore throat, had a slight chill, and there was a slight increase of temperature. This proved to be nothing more than a mild attack of bronchitis. On March 9th, he was feeling quite well, and I had him removed to the operating-room for operation.

Previously to performing internal urethrotomy, I have, for the past year or two, injected into the urethra a solution of muriate of cocaine, which has lessened the pain of the operation. although not completely rendering the parts insensible to the cutting. The strength of the solution used in my previous cases had been five per cent.

The man was placed upon the opera-

[1] The injection of a solution of cocaine into the urethra followed by death.—*Medical News*, July 21, 1888.

ting table, one drachm of a twenty per cent. solution of muriate of cocaine was introduced into his urethra, by means of a long-nozzled urethral syringe which passed about four inches into the canal. The instrument had scarcely been taken out of the urethra when the patient made a foolish remark, the muscles of his face began to twitch, the eyes staring, pupils dilated, frothing at the mouth, face much congested, respiration interfered with, and ending in a violent epileptiform convulsion, lasting for some seconds. These convulsions were continued with increasing violence, several times a minute, the whole muscular system taking part in the spasms, requiring considerable force to keep him from falling off the table. The action of the heart was not much interfered with, and appeared only to be secondarily affected. It was the respiratory function that seemed first to fail, and then the heart's action became irregular and slow. The breathing was gradually more and more interfered with, in fact, the entire surface of the body became deeply cyanosed, the pulse slow, and at the end of twenty minutes from the first convulsion had ceased to beat. The man was dead.

The means employed to relieve the patient were all useless; nothing had any effect in controlling, lessening or in any way influencing the ultimate result, and I may say every thing was promptly and efficiently done; the entire staff of resident physicians of the hospital ably assisted me in my efforts, which unfortunately were futile.

The *post-mortem* was made by Dr. Grimm, *Thorax:* Lungs normal, but much congested; heart normal, right side empty, left side filled with currant-jelly clots. *Abdomen:* Liver much congested; spleen presented on its surface several stellate cicatrices; kidneys much congested and also cicatrices similar to those seen on the surface of the spleen; they were thought possibly to be syphilitic in nature. The *urethra* was examined to ascertain if there had been a rupture made in introducing the syringe, but no such leison was found. The *brain* showed the blood-vessels very much congested: its membranes on either side of the longitudinal sinus at the vertex, covering a space of two square inches, were thickened and closely attached to the brain-substance: this probably was the result of some previous inflammatory action.

MISCELLANEOUS.

Sevestre on Powered Talc in the Treatment of Diarrhœa.—Following the method of Debove, the author has used powered talc mixed with milk in the treatment of seven children affected with a diarrhœa of eight days' standing. Daily doses of from five to eight drachms were well borne and three of them were cured in four or five days. In the remaining cases the discharges were notably checked and resumed their natural color. Two cases were reported as cured in twenty-four hours. All stopped emaciating and some gained weight.

Féréol has employed this remedy in the diarrhœa of phthisis, giving as much as three ounces daily in milk, with the result of checking the diarrhœa in mild but not in bad cases.—*Le Praticien*, July 9, 1888.

Duke (A.) on Menthol in Pruritus Vulvæ.—I have found that the application of the solid "menthol" (as sold in cone-shaped boxes for relieving neuralgic pain) is far more effective and more permanent in its action in giving relief in this distressing complaint. The menthol should be well rubbed over the mucous surface, avoiding all cracks or tender spots. A sense of burning is at first complained of, but is very soon followed by what one of my patients described as a "delicious coolness," which lasts for a considerable time. I fancy similar relief would be given by the use of the menthol in pruritus ani.—*Br. Med. Journ.*, July 14, 1888.

Maximowitch on the Action of Chloral Injected into the Carotid Artery.—The injection is made centrifugally in the carotid artery. There follows at once a paralysis of motion and sensibility in the corresponding side of the face. There is also a paralysis of the sympathetic (vascular dilatation and myosis) and occasionally choreiform movements on the same side. If the animal survive there develop trophic changes analogous to those which follow section of the trigeminus.—*La Tribune Méd.*, July 1, 1888.

On Rectal Insufflation of Hydrogen Gas as an Infallible Test of Gastro-Intestinal Perforation.—It is now only three months since Senn published to the world the harmlessness and great practical utility of the above-mentioned procedure. Now Dr. J. L. Hillmantel, of Chicago, publishes two cases of gun-

shot wounds of the abdomen in which the hydrogen-gas test was applied, both cases demonstrating by post-mortem revelations the infallibility of the test.

Senn's experiments it will be remembered were performed as follows[1]:

The animals were strapped on one of Pasteur's operating tables. Abdomen shaved, and after complete etherization the shooting was done at short range with a thirty-two calibre revolver. Inflation of hydrogen gas was practised immediately after the shot was fired. and after its diagnostic value was carefully studied the abdomen was opened and its contents examined. for visceral injuries. In all cases where the colon was perforated inflation could be done under very slight pressure, as the gas readily escaped into the peritoneal cavity, and from there through the bullet wound in the abdominal wall, where it was ignited as it escaped. In the absence of a Wolf's bottle hydrogen gas can be readily generated in a large wide-mouthed bottle into which a small handful of chips of pure zinc is placed. The mouth of the bottle is closed with a cork with two perforations, through which two glass tubes are inserted, one for the purpose of pouring in water and sulphuric acid, and the other, which should be bent nearly at right angles, for leading away the gas. This glass tube and the rubber balloon with a capacity of 16 litres of gas are connected by means of a rubber tube. In from five to ten minutes the requisite amount of gas can be generated and every thing is ready for the inflation. The rubber tube connecting the balloon with the rectal tip of an ordinary syringe should be interrupted by a stop-cock, so that the escape of gas can be prevented whenever inflation is temporarily suspended. The return of gas along the sides of the rectal tip can be readily prevented by an assistant pressing the anal margins firmly against it. The inflation must always be made *slowly*, as *long continued, uninterrupted pressure accomplishes most effectually lateral and longitudinal dilatation of the cæcum*, conditions which render the ileo-cæcal valve incompetent, and which must be secured before inflation of the small intestines is possible. The entrance of gas from colon into the ileum is always attended by a diminution of pressure, and its occurrence can invariably be recognized by a gurgling or blowing sound over the ileo-cæcal valve, and sometimes the sounds are sufficiently loud to be heard at some distance.

If, after inflation, abdominal distension and tympanites be from the very first diffuse, and liver dulness has disappeared, it is a certain indication that it is due to the presence of gas in the peritoneal cavity, and not to distension of the gastro-intestinal canal. If, on the other hand, the distension and tympanites follow the course of the colon, and after the entrance of the gas through the ileo-cæcal valve is circumscribed and limited to the umbilical and hypogastric regions, and gradually extends to the upper portion of the abdomen, *and the liver dulness is displaced upwards*, it is in all probability caused by a gradual and successive inflation of the intact bowel in an upward direction. In some penetrating wounds of the abdomen it is difficult, if not impossible, to follow the course of the bullet through the abdominal wall with a probe or finger on account of a relative change of position of the different layers of tissues in the track of the bullet obliterating the canal, but even in these cases a moderate distension of the peritoneal cavity by an accumulation of gas outside of the intestines will force bubbles of gas through the tortuous canal, and by this sign the surgeon may know positively that some portion of the gastro-intestinal canal has been perforated, and in order to prove that the bubbles which escape are part of the hydrogen gas which has been inflated he applies a lighted match or taper, and if it is hydrogen gas it will ignite with a slight explosive report, and burn with a characteristic blue flame. The burning of the escaping hydrogen gas on the surface of the external wound is a most effective means in securing for the wound an aseptic condition and on that account the escaping gas should be lighted both for diagnostic and therapeutic purposes in all cases in which rectal insufflation of hydrogen gas reveals the presence of visceral injuries of the gastro-intestinal canal.

As the hydrogen gas from its low specific gravity will always occupy the highest space in a cavity partially filled with fluids, it is necessary to place the external abdominal wound in such a position that blood or any other fluid that may be present in the abdominal cavity will not inter-

[1] *Jour. Am. Med. Ass'n*, 1888, pp. 777 and 807.

fere with its ready escape. If the wound is anterior, the patient must be placed in dorsal position ; if lateral, on the opposite side during the inflation. If during inflation early and diffuse tympanites takes place, it speaks in favor of perforation of the colon.

Should the external wound prevent the escape of gas from the peritoneal cavity by sliding of the different layers of tissue of the wound in the abdominal wall, or by the presence of a coagulum in the track made by the bullet, it becomes necessary to secure a sufficient degree of patency of the wound for the escape of gas by careful probing or the removal of coagulated blood. The finding of perforations is also greatly facilitated by inflation, as the bowel below the lowest perforation will always be found at least slightly dilated by gas. If this perforation is now closed and additional perforations are suspected to exist the inflation can be repeated, and the bowel will again become distended as far as the next perforation, and this process can be repeated until the entire intestinal canal has been examined by this method. By searching for leaking points in this manner but little manipulation of the intestines becomes necessary, and thus one of the great sources of danger in the operative treatment of wounds or perforations of the gastro-intestinal canal is avoided. The moderate distension of the intestines left after treating the visceral wounds never interfered with the return of the intestines into the abdomidal cavity or the closure of the external wound in any of the experiments, and the numerous observations made in reference to the disappearance of the gas by absorption, or escape through the natural outlets, are conclusive in showing that the distension due to the presence of the gas disappears in a remarkably short time, and it can therefore be safely stated that rectal insufflation of hydrogen gas in the diagnosis and treatment of penetrating wounds of the abdomen does not interfere with an *ideal* healing of the visceral and laparotomy wounds. After a careful study of the subject of rectal insufflation of hydrogen gas in its various aspects, I do not hesitate to recommend its adoption in practice as an infallible diagnostic test in demonstrating the existence of a wound of the gastro-intestinal canal in penetrating wounds of the abdomen or perforations from any other cause, without resorting to an exploratory laparotomy. The author thus summarizes the subject :

1. The entire alimentary canal is permeable to rectal insufflation of air or gas.

2. Inflation of the entire alimentary canal from above downwards through a stomach tube seldom succeeds, and should therefore only be resorted to in demonstrating the presence of a perforation or wound of the stomach, and for locating other lesions in the organ or its immediate vicinity.

3. The ileo-cæcal valve is rendered incompetent, and permeable by rectal insufflation of air or gas under a pressure varying from one fourth of a pound to two pounds.

4. Air or gas can be forced through the whole alimentary canal from anus to mouth under a pressure varying from one third of a pound to two pounds and a half.

5. Rectal insufflation of air or gas to be both safe and effective must be done very slowly and without interruptions.

6. The safest and most effective rectal insufflator is a rubber balloon large enough to hold sixteen litres of air or gas.

7. Hydrogen gas should be preferred to atmospheric air or other gases for purposes of inflation in all cases where this procedure is indicated.

8. The resisting power of the intestinal wall is nearly the same throughout the entire length of the canal, and in a normal condition yields to diastaltic force of from eight to twelve pounds of pressure. When rupture takes place it either occurs as a longitudinal laceration of the peritoneum on the convex surface of the bowel, or as multiple ruptures from within outwards at the mesenteric attachment. The former result follows rapid, and the latter slow, inflation.

9. Hydrogen gas is devoid of toxic properties, non-irritating when brought in contact with living tissues. and is rapidly absorbed from the connective-tissue spaces and all of the large serous cavities.

10. The escape of air or gas through the ileo-cæcal valve from below upwards is always attended by a blowing or gurgling sound, heard most distinctly over the ileocæcal region and by a sudden diminution of pressure.

11. The incompetency of the ileo-cæcal valve is caused by a lateral and longitudinal distension of the cæcum which mechanically separates the margins of the valve.

12. In gunshot or punctured wounds of

the gastro-intestinal canal insufflation of hydrogen gas enables the surgeon to demonstrate positively the existence of the visceral injury without incurring the risks and medico-legal responsibilities incident to an exploratory laparotomy.

Now as to the practical application of this test by Hillmantel. In the *Journal of the Am. Med. Ass'n* for July 21, 1888, he reports the following two cases:

Case 1.—P. C., male, æt. fifty years, in good general health. Was shot at 2 P. M., July 4, by a man sitting about eight feet directly in front of him. The calibre of the ball could not be ascertained. A physician was summoned, who made an examination, and after introducing a probe several inches, he advised sending the patient to the hospital. He was brought here, sitting in a carriage, with no dressing on the wound. Upon his entrance here, 7 P. M., the abdomen was disinfected, the wound sealed, and a hypodermic injection of ♏ vij of Magendie's solution given.

Examination.—Patient conscious, no marked pallor, hands cold. Pulse full and 96 a minute; temperature 99°. Some pain in abdomen. An opening with blackened margins was found just to the right and on a level with the umbilicus, from which a small quantity of bloody fluid oozed. Abdomen not distended, but showed a changing line of dulness, corresponding to changes in position of patient, and indicated the presence of fluid in the peritoneal cavity. Liver dulness present. Patient very restless. Introduction of catheter gave about ten ounces of normal urine. Rectum filled with fæces, but contained no blood. After about 15 minutes he vomited for the first time since injury; vomited matter contained no blood. Hydrogen gas was then insufflated, the entire intestinal canal being distended until the man complained of a tense abdomen and "belched up." The gas could be accurately followed, passing through the ileo-cæcal valve with a gurgle, next filling up the umbilical region, and finally distending the stomach. During this time the wound was very closely watched to notice the escape of gas. None escaped, but some bloody, serous fluid was forced out by the general distension; and as the wound was all this time covered by fluid, gas would have escaped in bubbles. A stomach tube was then introduced, which procedure caused much straining.

It was decided that the pressure exerted and the escape of gas from the mouth were sufficient proof that the intestinal canal was intact and that laparotomy was not indicated. The wound was dressed antiseptically, patient put to bed at 9 P. M. and treated as after laparotomy. He rested fairly well during night. Urine passed normally. Bowels quiet for three days, when he received by mistake some potatoes and mush, after which he had one or two normal bowel movements daily. He was then put on light diet.

July 10th, the wound was dressed and found to be closed. An area of induration was present around the same of the size of a quarter of a dollar, which was somewhat tender. On the same evening patient vomited once, ejecting only the ingesta. The next morning patient felt as usual. The pulse had been between 72 and 96 a minute all this time; temperature between 99° and 100°. At noon patient vomited again and pulse rose to 110. During the afternoon he vomited twice more and pulse gradually rose to 140. Temperature 100°. At 7 P. M. patient bathed in perspiration, pulse very weak.

Dr. Fenger made an examination and found a small tumor in right hypochondrium, which was painful on pressure. No abdominal distension, percussion gave flatness, especially over right side. Dr. Fenger decided to make a laparotomy immediately. An incision, 5 in., was made to the right of umbilicus. The stomach was found dilated. Recent adhesions between coils of intestines omentum and mesentery. Upon breaking through these, about 8 ounces of thin, milky, purulent fluid gushed out, emitting a slightly fæcal odor. The patient was turned on his right side and the cavity flushed with warm boracic-acid solution. The remainder of the peritoneal cavity was protected by shutting it off with a hot towel. A large glass drain was inserted, together with some gauze, abdominal walls closed and dressed. Ether was used as an anæsthetic and continual stimulation was necessary. The abscess cavity was washed out every two hours with warm boracic-acid solution. The patient's pulse gradually failed and he expired eight hours after the operation.

Autopsy.—Ten hours after death. On opening the abdominal wound the omentum and intestines were found agglutinated. The glass drain was in the bottom of a pus

cavity just to the right of the stomach, between it and the turn of the duodenum. On separating the adhesions, three more pus cavities were found; closed off by adhesions formed between the omentum, pancreas, and coils of ileum and possibly following the tract of the bullet or probe. No fluid was found free in the general peritoneal cavity, but all intestines presented a congested appearance. The entire gastro-intestinal canal was searched for perforations, but none were found. The pus in the cavities contained no fæcal matter. The remaining abdominal organs were also found congested. The stomach contained dark grumous matter.

Case 2.—Patient, male, æt. twenty-three, in good health, was shot with a pistol, calibre 32, held in his own hand during the act of striking another person with the butt-end. One and one half hours after the injury he was brought to the hospital. Complained of some pain in abdomen. Vomited shortly afterwards and made several ineffectual efforts at defecation. Vomit contained some clots of blood. Dr. Fenger was summoned.

Examination.—Patient conscious, very thirsty. Pulse somewhat feeble and 100. A bullet wound was present, one inch to right and on a level with umbilicus. Percussion showed presence of liver dulness and a line of dulness extending down on right side of abdomen in a curved direction, concave towards umbilicus, from liver to pubes, pointing to the presence of fluid in the abdomen. Catheterization gave 6 ounces of normal urine. Patient etherized and hydrogen-gas test applied. On introducing the rectal tube for that purpose, blood was found present in the rectum. The gas, with only slight pressure, was soon heard to enter the abdominal cavity with a gurgling sound, and in a few seconds issued in bubbles from the bullet wound. On application of a lighted candle these burned in spurts. Dr. Fenger decided to perform laparotomy, as the proof was conclusive that the intestines were perforated.

Incision, 6 inches, in linea alba, and subsequently enlarged to 10 inches. A large quantity of blood escaped with a gush. Almost the entire abdominal cavity was filled with blood. Fourteen perforations were found between the ileo-cæcal valve and the stomach; also two severe contusions of the external coats of the intestines, so that it was deemed necessary to cover the places by peritoneal sutures. Besides these, four holes were found in the mesentery, in which were numerous bleeding vessels. The perforations were closed by Czerny-Lembert sutures. In two places two perforations were so close together that they were included by one line of suture. At two other points there were four perforations so close together that it was necessary to remove these portions of the gut. This was done by resection, the cut ends closed, and the continuity of the lumen restored by lateral approximation with decalcified bone plates after the method of Dr. Senn.

After all the apertures found were closed and the vessels tied, the intestines were replaced, and gas again insufflated. The sutures proved to be absolutely air-tight. Some bubbles, however, escaped from the upper extremity of the incision, but Dr. Fenger thought it came from the peritoneal cavity. The abdomen was flushed, but the patient, from shock and loss of blood, was expiring. During the operation the entire mass of intestines was necessarily exposed, but was kept covered with towels and hot boracic acid solution allowed to trickle over them. Constant stimulation was necessary to keep the patient alive.

At an interval of an hour two inundations of saline solution were made, 16 ounces being used each time. A marked beneficial effect was noticed on the pulse as well as on the general condition of the patient. Abdominal wound not closed, as the patient had expired. Duration of operation two hours and three quarters.

Autopsy.—One hour after death. On removing the intestinal tract the following appeared: Two contusions in the mesentery of descending colon; large contusion with extravasation of blood in transverse colon, with a wound in the mesentery; contusion of mesentery at ileo-cæcal valve; contusion of coats of ileum 8 inches above ileo-cæcal valve; extravasation of blood in mesentery 14 inches above valve; perforation 23 inches above valve in intestine (sutured); the same 32 inches above previous (sutured); same 30 inches above previous (sutured); same 18 inches above previous (sutured). Bone plate approximation 9 inches above last, where resection of 3 inches of gut had been made, the resected piece presenting four perforations.

Extensive extravasation of blood immediately above this point in mesentery. Contusion of intestine 9 inches above the resection. Contusion and extravasation 29 inches above same point; perforation 47 inches above same point (sutured). The second place of lateral apposition was found 11 inches below pylorus, where 2½ inches of gut with four perforations had been resected. Finally, a perforation was found in the pyloric end of the stomach which was not sutured.

The remaining viscera were found normal. After a diligent search the bullet could not be found, although all the organs were examined, as well as the entire spinal column exposed. A minute dissection could not be made, as the section had necessarily to be stopped, but the supposition was that the bullet had lodged in the muscles of the back.

Levis (R. J.) on the Arrest of Hemorrhage from Wounds of the Palm of the Hand.—My experience with hemorrhage from wounds of the palmar arches is that it is usually controllable by maintaining extreme elevation of the hand. This is most thoroughly effected, and with the least discomfort to the patient, by vertical suspension of the limb, the attachment being made along the palmar and dorsal surfaces of the forearm by adhesive strips, after the ordinary manner of making extension in the treatment of fractures. A cord from the adhesive straps may be fastened to the top of a bedpost or other convenient elevated point.

If posture alone should not arrest the hemorrhage, the most effective compression can be made by placing in the palm of the hand an india-rubber ball, or a ball solidly made of cotton wadding, and on this the fingers and thumb should be closed and bound tightly with a roller bandage.

Using these expedients I have never been obliged to ligate arterial trunks for the arrest of hemorrhage from the palm of the hand.—*Med. and Surg. Rep.*, July 14, 1888.

Allen (T. J.) on a Case of Impregnation after an Operation for Vesico-Vaginal Fistula in Which the Cervix was Turned into the Bladder.—About two years ago I was consulted by Mrs. F. E., aged about 43 years; weight about 175 pounds; general health good and the mother of thirteen children. She informed me she had easy and natural labors with all her children, except the last one some two months previously; in this confinement she was in labor for three days, had to be delivered by a physician and the child was dead. After this labor she informed me she had been unable to retain her urine and that it dribbled from her constantly.

Upon examination I found an extensive vesico-vaginal fistula; it was over two and a half inches in length by one and a half in width, of irregular shape, but with the length running antero-posterior to the axis of the vagina, the opening extended well up to the posterior utero-vaginal attachment, and the small remnant of the *cervix uteri* pointed well into the bladder; nor did it seem practical to pull it down, so firmly was it tied down by adhesive inflammation. After thorough examination and consultation with Dr. T. G. Ford and my son, Dr. J. W. Allen, we concluded, in consideration of the age, the number of children she had borne, the probable near approach to the menopause, the seeming impracticability of drawing down the womb from a position nature seemed to help repair the injury, to perform the operation by turning the womb in the bladder. On the 20th of May, 1886, aided by the above-named physicians, I pared the edges of the fistula and after more than ordinary difficulty, owing to inflammatory adhesions, shortening of the broad ligaments, or both, I performed the usual operation, using the wire suture and carrying out the technique as laid down by Thomas. A small fistula remained; but in this condition, one of comparative comfort, she continued in good health and menstruated regularly (through the bladder of course), until the latter part of July, 1887, the date of her last visit and examination.

I heard nothing of my patient until about the 1st of February last, when I was informed by her husband that she had seen no appearance of her menses since the latter part of July, that her abdomen was enlarged and that she feared she was *enciente*. As I considered such a result next to impossible, I merely advised him as soon as convenient, to bring the patient up to see me. She lived about twenty miles distant. March 7th, she came to my infirmary; imagine my surprise on examination to find her in her ninth month of utero-gestation.

On the following day, I invited several medical men to see the case and advise with me as to the best course to pursue It was decided to operate at once in the median line of the operation previously performed, and to endeavor to keep the incision open if possible until the approaching labor, which they thought might be expected in two or three weeks.

It was decided not to use ether or chloroform, but to freely apply cocaine to the vagina for half an hour before operating. When this had been done, the patient was put upon the table and in the knee-elbow position. A large Sims speculum was introduced into the vagina. A Gouley's dilating urethrotome was passed into the urethra, the bladder, and up along the fistulous track out into the vagina, then with a long-handled scalpel an incision was made from the fistula to the bas fond of the bladder; there was but little pain evinced and not much hemorrhage. After the operation, three fingers could be easily introduced into the opening, and the child's head was plainly felt. The abnormal condition of the os uteri called forth the remark from one of the physicians examining, that it reminded him of a jug with the neck broken off—the injury sustained by the womb during the labor that produced the fistula. The patient was put to bed and kept in my infirmary for several days; the wound showed great disposition to close, and it was necessary to break up daily adhesions thrown out. She continued to do well, and on the 5th day left the infirmary for the place secured for her confinement. On the 29th of March I was called at 3 o'clock A.M. to see her; the message brought was that she thought she was in labor. The labor lasted about six hours and she was safely delivered of a healthy child weighing about eight pounds.

On the 21st inst. I called to see her and made an examination by the touch. I found the fistula or opening had contracted to less than one inch in diameter. Certainly this case will lead us to conclude that pregnancy may occur wherever there is a fistulous opening communicating with the vagina and womb, even though that be ever so small and tortuous, and pass through the bladder in its course.—*New Orleans Med. and Surg. Jour.*, July, 1888.

Thurston (S. D.) on Chronic Perforating Ulcer of the Bladder.—The patient was a married woman of fifty-two, the mother of two children. The menopause occurred at the age of forty-two. In October, 1883, she was struck on the sacrum by the wheel of a carriage and violently thrown down, striking upon the coccyx. Much lameness and soreness followed, but these passed away leaving an irritability of the bladder which persisted and was so great that only about an ounce of urine could be retained. Through a dilated urethra the bladder, explored with the finger, was found normal except for a slight thickening of its walls. The urine was normal.

In September 1885, the pain and tenesmus had to be relieved by keeping the urethra dilated in such a way that the urine flowed out as soon as secreted.

In February, 1887, her suffering became so intense that a vesico-vaginal opening was made. The pain and tenesmus were relieved by this operation, but she grew weaker, and died April 6, 1888.

On post-mortem there was found a perforating ulcer in the posterior wall of the fundus of the bladder, closely resembling a "bullet-hole" whose points of entrance and exit would be the inner and outer walls respectively of that organ. The ulcer was circular in form; its inner opening about the size of a twenty-cent piece, its outer the size of a half dime. The outer opening was shut off from the peritoneal cavity by the omentum, which had, by adhesive inflammation, adhered to the bladder walls for some distance beyond the margin of the ulcer, thus really forming an impervious floor or roof for it, and effectually preventing the entrance of matters into the peritoneal cavity.

The margin of the ulcer was somewhat ragged and markedly gangrenous. The floor of it was covered with a sloughing detritus. The bladder was concentrically hypertrophied, to such an extent as to limit its capacity to about a fluid ounce. There was no evidence of inflammation, such as is found in cases of cystitis, nor any signs of pelvic or general peritonitis. The uterus, atrophied to its proper size, was, together with all the other pelvic organs and tissues, perfectly healthy. The liver, spleen, kidneys, and all the abdominal and thoracic organs were normal, and no evidence of phthisis to be found.—*Texas Courier-Record of Medicine*, June, 1888.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of

CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital; CONDICT W. CUTLER, M.D., Instructor in Diseases of the Skin, Post-Graduate Medical School, New York; JOHN D. HAWLEY, M.D., Attending Gynæcologist, New York Hospital, Out-Patient Department.

VOL. V., NO. 32. August 9, 1888. WHOLE NO. 80.

CONTENTS.

PAGE

Occasional Report on Diseases of the Rectum and Anus 377

Therapeutics 383

Miscellaneous 386

OCCASIONAL REPORT ON DISEASES OF THE RECTUM AND ANUS.

BY CHAS. R. KELSEY, M.D., NEW YORK.

Morton (T. G.) on an Unusual Fistula in Ano.—The external opening of the fistula was a little below the middle of the posterior aspect of the thigh. The skin and adjacent tissues were indurated, and a probe passed a little more than three inches directly towards the sciatic nerve. Upon a grooved director a knife was carried in and the track of the fistula slit up. The track was found to extend up the thigh, the tissues being successively divided till the buttock was reached. When this also was divided the track approached the surface, and finally opened into the bowel about half an inch above the external sphincter. The distance between the two points was twelve or fourteen inches, and there was no indication in the intermediate tissues of any communication between them.

The track of the fistula was thoroughly cleared with the curette, the cut edges brought together with deep sutures, and union secured as in an incised wound.—*The Med. Register*, Nov. 26, 1887.

Benton (S.) on Blind Internal Horseshoe Fistula.—Horseshoe fistulæ, as at present understood, are complete fistulæ having an external opening on the side opposite that of internal opening into the rectum. This form is rare, the writer having met only five cases in seven hundred and fifty fistulæ of all varieties. He gives seven cases of incomplete, blind, internal horseshoe fistulæ—a form not previously described by name.

From these we gather that fistula of the horseshoe shape may be complete or incomplete. It may be complicated with prolapsus, but the most usual complication is anal ulcer. Thirty-five is the average age of the cases reported, male and female being equally liable to suffer. The average number of days in bed was a little over fourteen. If a correct diagnosis is made, the treatment is comparatively simple, and consists in laying open the sinus, paring the edges, packing it systematically with small pieces of cotton-wool, and getting it to heal from the bottom.—*The Med. Register*, June 14, 1888.

Weir (R. F.) on Whitehead's Operation for Hemorrhoids.—After first being unfavorably impressed by his experience with this operation, Weir now reports favorably of it, his experience with the new and modified method being based upon six satisfactory cases.

He has himself somewhat varied the technique, for after separating the mucous membrane at the anus by scissors, all around, at one limited spot he carries the dissection deeper in an upward direction until the normal mucous membrane of the bowel is reached. From this point, by means of the finger-nail, or with the end of a blunt curved scissors, the mucous membrane can be stripped from the external tissues down close to the circumferential initial incision about the anus, when any intervening tissues can be cut through quickly with the scissors. In this way, proceeding right and left, the separation of the bowel may be accomplished with de-

cidedly increased rapidity and certainty. He has also dropped the introduction of the drainage tube, and he does not dust the surfaces with iodoform, though he uses the usual sublimate solution of 1 to 5,000.

The operation of Whitehead has been so fully described that but little need be said as to the method of its performance.

Weir makes the correct point, that piles invade the submucous connective tissue, and hence have to be cut *through* in the first steps of the dissection instead of being *dissected off*. The great point in operating is to make the circumferential incision not in the line of junction between skin and mucous membrane, but in the mucous membrane itself inside the line of junction. In this way only can a stricture of the anus be avoided.

The author sums up his conclusions as follows: "While for the less severe cases of hemorrhoids the operation of injection with carbolic acid (and preferably with the 1 to 20 solution) is to be first thought of, and while for the more decided form of this disease Allingham's method yet stands unequalled, yet for the extensive conditions of hemorrhoidal disease met with in the preceding cases, and which have been hitherto treated by tying off three, four, and sometimes more masses, I believe that greater efficacy and greater permanence of cure will be accomplished by the resort to Whitehead's method, and that less after-discomfort to the patient will be felt than by the well-known method of ligature as practised by Mr. Allingham."—*The Med. Record*, July 14, 1888.

Auvard on a Case of Congenital Malformation.—The child in question was born at the end of the eighth month after a normal labor, the breech presenting. There was a cylindrical tumor three or four centimetres in diameter at the site of the umbilicus, which included the elements of the cord, and was covered with amnion. On the anterior aspect of the cord, at a distance of three centimetres from the umbilicus, was an opening large enough to admit the end of the little finger, and from it escaped a thick, greenish fluid having all the appearances of meconium. The anus was permeable, and the genitals (male) were normal. The cord fell on the tenth day, leaving an umbilical tumor as large as a walnut, in which there was an opening on the anterior superior aspect. A sound penetrated this opening six centimetres The child did badly from the first, and died on the thirty-fourth day from progressive athrepsia. The abdomen having been opened, a loop of intestine was found opposite the umbilicus, from which a diverticulum proceeded to the umbilical opening.—*Arch. of Pediatrics*, July, 1888; from *Bull. et Mém. de la Soc. Obstet. et Gyn.*, Feb., 1888.

On Kraske's and Schede's Operations for Cancer.—Kraske's operation, it will be remembered (described in the *Verhandlungen* der Deutschen Gesellschaft für Chirurgie, Bd. II., 1885), consists briefly in making a median cut from the second sacral vertebra to the anus; severing the left glutens maximus from its sacral attachment; excising the coccyx; detaching the sacral connections of the tubero-sacral and spinoso-sacral ligaments; and chiselling away the lateral mass of the sacrum in a curved line, which begins at the outer border of the third sacral foramen and terminates at the corner of the sacrum. The anus being next freed by a circular incision, the rectum is detached from its bed; the peritoneal cavity is opened also by a circular cut; the gut drawn well down and amputated above the tumor, and its end fixed by sutures to the paraänal tissues. The operation is completed by inserting a drainage tube into the peritoneal cavity, and plugging the rectum and wound with iodoform gauze.

In his first case the disease recurred at the end of four months. In seven subsequent cases by Kraske, three by Schönborn, one by Rinne, and one by Lauenstein, the anus and lower part of the rectum were spared, and about two-thirds of the anterior wall of the central end of the gut were united by sutures to the peripheral end, the posterior segment of the gut being left open for the escape of fæces. Of these 12 cases 6 died—2 of exhaustion, 1 of sepsis, 1 of peritonitis, caused by giving way of the sutures and the entrance of fæces into the peritoneal cavity, and 1 of iodoform poisoning. Of the 7 recoveries, 3 had fistulous openings at the end of three, three and a half, and five months respectively; in 2 the healing was not complete till the end of six and eleven months respectively; and 2 were recorded at the end of one and three months respectively. Hence, of the entire number 38 per cent. died, and there is no record of any permanent cure.

The serious objection to this method seems to be that the peritoneal cavity is not closed, and that contact of fæcal matter with the wound prolongs the healing process, favors septic complications, and results in the formation of a sacral artificial anus.

To overcome these disadvantages Schede (*Deutsche Medicinische Wochenschrift*, No. 48, 1887) describes 3 cases in which after following the preliminary steps of Kraske he introduces certain modifications. In the first case, he attached the divided peritoneum to the serous surface of the sigmoid flexure of the colon, thereby closing the cavity of the belly, and left the anus, sphincters, and lower end of the gut intact, and secured it to the central end with two circular rows of sutures, of which the first included the mucous membrane, and the second the other coats of the bowel.

The wound was dressed with iodoform gauze, and opium administered to control the stools. The result was not wholly satisfactory; the ends of the gut did not entirely unite by primary intention, and nearly a year elapsed before the complete closure of the small fistulous track. The sphincters retained their functions however, and there was no difficulty from involuntary evacuations.

The great value of closing the peritoneal cavity is shown in two of Kraske's cases in which it was omitted, although complete union of the divided ends of the bowel was attempted. In both instances the stitches gave way, during a stool which occurred a few hours after the operation, despite previous efforts to thoroughly empty the bowel and the subsequent exhibition of opium, and death ensued from peritonitis from fæcal extravasation.

The protracted healing in this case of Schede was due to contact of fæces with the sutured bowel. Hence, in the other two operations immediately after resecting the rectum he made an artificial anus between the belly and descending colon. In the first of these four fifths of the rectal wound united by first intention, and the remainder by granulation, while the other wound had closed in two months and a half. The artificial opening was then remedied, and at the end of four months from the primary operation the patient was discharged. The second of these cases followed a very similar course.

Considering the two methods together the operation has been performed at least 18 times with 7 deaths—a mortality about equal to that of Bardenheuer's procedure of removing anus, sphincter, bowel, and tumor; opening the peritoneal sac, drawing down the divided gut, and attaching it to the perianal tissues.—*The Med. News*, Feb. 4, 1888.

Goodsall (D. H.) On Foreign Bodies.—From an experience of twenty cases, the author concludes that this form of accident is more common after the age of thirty-five. That a bone takes from one to nine days to pass from the mouth to the anus. That the pain in the rectum comes on suddenly during defecation. That there is constant pain in the rectum and often in adjacent parts from the time of puncture till the foreign body is removed. That the site of puncture is within the last inch of the rectum. That when abscess follows the puncture it begins to form within two or three days; but that when the case is seen early and the bone removed no ill-effects are likely to follow the puncture. That when fistula has formed the patient may be cured by a free external opening unless the internal one be large. That when it is necessary to lay open the fistula the wound made heals much more rapidly after the foreign body is removed than in non-traumatic cases. That when the case is seen soon after the foreign body has punctured the rectum, and before abscess has formed, the patient should be etherized and the sphincter stretched. The body should then be removed, either from the rectum or by external incision. The bowels should be confined for three or four days and then moved by an enema of olive oil.—*Brit. Med. Jour.*, July 7, 1888.

Wyeth on Closure of Urethro-Rectal Fistulæ.—The patient, a man, aged twenty-seven, had a urethro-perineal fistula resulting from an operation for stone. Four attempts had been made to close this without success. In the last of these a drainage tube about one and one-half inches long was inserted in the perineal opening and left with the deep end in the urethra. This tube, about three sixteenths of an inch in diameter, was lost sight of and both doctor and patient supposed it had fallen out and been thrown away in the dressings. The last operation was followed by considerable persistent pain. In the course of three months an abscess opened into the rectum through

the anterior wall, and the urine began to flow freely in this new channel. About this time the perineal opening was closed and an abscess formed in each tunica vaginalis, which were incised and healed. At this date nearly all the urine passed per rectum, and the patient suffered so greatly that he had to be kept constantly under the influence of opium.

An examination per rectum revealed the presence of a stone, the end of which was on a level with the anterior surface of the rectum, about one inch beyond the anal aperture. This was removed through the rectum by means of strong forceps, and found to be a concretion around the lost drainage tube.

The patient was then etherized and placed in Sims' position, and a large Sims' vaginal speculum introduced. The opening through the anterior wall of the rectum measured three quarters of an inch in length, with an irregular width of from one-eighth to one quarter of an inch. It led directly into the urethra near the junction of the membranous and prostatic portions. The floor of the urethra was entirely destroyed. The right edge of the opening was slightly undermined.

It was decided to attempt the formation of a new floor to the urethra by turning the mucous membrane of the rectum into this position. Two crescentic incisions were made, about parallel with the edges of the opening, but approaching more closely at its upper and lower angles. These incisions went deeply into the wall of the rectum and included the mucous and muscular layers. The two lateral flaps were dissected up and turned towards each other, their raw edges meeting in the middle line, while the raw surfaces looked into the rectum, and the mucous surfaces into the urethra. Sutures of silkworm gut were inserted about three sixteenths of an inch apart, so that they did not penetrate the cavity of the urethra. A Nelaton's catheter was carried from the meatus into the bladder, and through it the urine escaped at intervals. Whenever the urine accumulated enough to create a desire to expel it, about six ounces of Thiersch's solution were thrown in to dilute it, and when this with the normal contents of the bladder was evacuated the same quantity was thrown in again and immediately expelled. In this way the wound was kept free from irritation by the urine; the bowels were confined for nine days; the sutures were left *in situ*; the wound healed promptly; and the patient left for his home three weeks after the operation.—*Canada Lancet*, July, 1888.

Quénu on Spontaneous Rupture of Rectum.—A woman, aged 60, of very weak constitution, had suffered for six years from prolapse of the rectum, which, however, was easily reducible. Being habitually constipated she made free use of purgatives, and frequently passed blood. For the last six weeks she suffered more than usual and kept her bed. The day of the accident she made great efforts at defecation, and suddenly felt something come down, followed by great pain and loss of blood. A doctor who was called ordered her sent to the hospital, and when Quénu arrived he found the woman pale and cold with a yard of intestine black and shrivelled protruding from the arms. With a finger in the rectum a large rent by which the intestine escaped was felt in the anterior wall. Under chloroform the abdomen was incised in the median line and nothing but blood was discovered. The terminated intestine was removed close to the anus, but all attempts to suture the rent were useless. Iodoform dressings completed the operation and the patient died on the following day. The autopsy revealed a rent an inch and a half long, and a considerable number of varicose veins which M. Quénu considers pathogenic.—*Med. Press*, Feb. 8, 1888.

Kelsey (C. B.) On Antiseptics in Rectal Surgery.—As an offset in the various quack cases of instruments advertised to enable the purchaser to cure all cases of rectal disease, the author enumerates the contents of his own operating-bag as follows. It will be seen at a glance that it contains nothing unfamiliar to the general surgeon. He says:

"The universal acknowledgment of the value of antiseptic precautions in all surgical work has rendered the preparations for any operations upon the rectum much more elaborate than formerly. No surgeon meeting with an unfortunate result after any of even the simpler operations would feel quite blameless had he neglected these precautions; and he certainly would not be considered so by the profession at large. What is true of the minor operations applies with much greater force to the major

ones. The possibilities of diffuse inflammation, to which the peri-rectal cellular tissue is peculiarly liable, and of blood poisoning, is always to be borne in mind and guarded against.

For this reason, although I have never arranged a case of rectal instruments for operating (preferring to select those necessary for any particular case just before the operation and carry them rolled in chamois in a small hand-bag), I have for greater convenience arranged another bag which is always ready, and contains not the instruments for any particular operation, but the things which in addition to them are essential for every operation. I find that much time and annoyance is saved by this expedient, especially if the bag is carefully rearranged after each time it is used, and kept always ready for the next.

The bag is arranged on the general plan suggested by Dr. Gerster,[1] modified to suit the particular needs of rectal surgery. It contains:

1. Operating gown of white muslin, clean from the wash.

2. Two rubber sheets. One of these is a yard square to protect the carpet and hold an ordinary wash-bowl, which can always be obtained in any house; the other is one and a half yards long by a yard wide, and is long enough to protect the bed and hang down into the bowl as a trough for blood and fluids.

3. Fountain syringe with a loop of strong cord attached to the metal ring at the top so that it can be hung on top of a door if nothing else is convenient, and plenty of rubber tubing to reach a considerable distance. This is for irrigating, and the bichloride solution is carried in a bottle provided with a metal case. If it is made of the strength of sixteen grains to the ounce, one ounce of the solution to the quart of water will make a solution of about one part to the thousand.

4. A Clover's crutch (Dr. Peter's modification).

5. Ether and inhaler.

6. Small bottle of pure carbolic acid (all glass bottles should be in metal cases to prevent breakage).

Half an ounce of this to the pint of water poured into a shallow dish answers for immersing the instruments during the operation.

7. A small jar of carefully prepared sponges, each of which is thrown away after being used.

8. Long handled sponge holders.

9. A rubber bag full of picked lint and bichloride gauze.

10. Iodoform in an insufflator with a long nozzle. This is much better than the hard rubber sprinkling box with which it is very difficult to carry the powder within the rectum.

11. Bandages and suppositories.

12. Small graduate.

13. Vaseline or carboline.

The things thus far enumerated are necessary for every cutting operation about the rectum, and although their preparation and use entail some little care and trouble, it will be more than repaid both in actual results and in the sense of security. The time was when all that was necessary for an operation for hemorrhoids were forceps, scissors, and a string.

As the above-enumerated things are necessary for a simple operation, and only a few others are needed for a much more extensive one, the latter can easily be added when required. These are:

14. A jar full of drainage tubes of various sizes kept in carbolic-acid solution.

15. Bottles of catgut and silk sutures of all kinds. The silk may be kept in carbolic solution and the catgut in alcohol.

A very convenient arrangement for these is made by fitting a rubber cork tightly in a large-sized test-tube, and attaching to the cork a bobbin divided into three compartments for different sizes of ligatures.

16. A bell-shaped sponge with vulcanite tube and a bottle of dry subsulphate of iron for packing the rectum in case of hemorrhage.

17. Hypodermic syringe.

With this bag at hand the surgeon is ready for almost any emergency in rectal surgery. The cutting instruments, forceps, Paquelin cautery, écraseur, speculæ, artery forceps, etc., can be taken from their case and be ready for use in a very few moments.—*The International Journal of Surgery and Antiseptics*, April, 1888.

Thompson, on Rupture of the Rectum from a Fall.—C——, aged eighteen, was admitted on May 20, 1887. He stated that he had fallen about four

[1] *N. Y. Med. Jour.*, April 2 and 9, 1887.

feet, in a sitting posture, on to the end of the upright shaft of a smith's hammer, which he described as having entered his seat for a considerable but unknown distance, and requiring some amount of force in its removal, which was accomplished by a fellow-workman. He had very little pain at the time of the accident, and walked about a mile to the infirmary without much trouble. On examination only some slight bruising was found around the anus, with a little blood-stained mucus. Per rectum nothing was detected. The abdominal walls were quite flaccid. Examination caused no pain. He complained, however, of a slight, continuous, aching pain just above the pubes. Soon after admission he passed both urine and fæces, the former normal, the latter soft and streaked with blood. Some hours later he passed another motion, with a considerable quantity of clotted blood; the supra-pubic pain also became more intense, but the abdominal walls still remained flaccid. The face was very pale, the pulse rather weak, and the extremities cold; but the patient appeared to be in good spirits, answered questions readily, and did not feel unwell. He remained in this condition until midnight, when the abdominal pain became more severe. Symptoms of collapse gradually came on, and he died at 8 A. M. At the necropsy, on the same morning, the peritoneum was everywhere found intensely injected, and in part presented a thin layer of lymph. There was a marked laceration in the recto-vesical pouch a little to the right of the middle line, which led into a triangular opening in the wall of the rectum, about three inches from the anus; this aperture was triangular, its base measuring one inch and a half, its sides an inch each. At the brim of the pelvis, on the right side, was a laceration of the peritoneum covering the psoas, with bruising of the subjacent muscle. The mesenteric glands were enlarged and inflamed. The abdominal cavity contained a small quantity of hard fæces; there was also found a piece of cloth corduroy two inches long and one inch and a half in breadth, corresponding in texture to the patient's trousers and to an aperture in their seat.—*Lancet*, Dec. 3, 1887.

Allingham (H. W., Jr.) on Incontinence of Fæces Following Operations for Fistula.—He divides these cases into three general classes. First, those in which a deep cut has been made through both sphincters, which in healing has left a deep sulcus, the divided ends of the muscles being curled outward by the contraction of the scar. As the contraction increases, the loss of muscular power also increases, till complete or partial incontinence with atrophy of the sphincters results. For this condition he recommends freeing of the ends of the muscle by a deep incision through the old cicatrix, and allowing the wound once more to heal from the bottom by granulation.

A better plan would seem to be an excision in great measure of the old cicatrix, a free exposure of the divided ends of the muscles, and an attempt at union by first intention by means of deep and superficial sutures and antiseptic precautions.

Second. Cases in which one or both sphincters have been divided in two places, and often obliquely resulting in paralysis and incontinence. In these he makes no attempt at the restoration of the muscular incontinuity, but produces an artificial stricture of the anus by free use of the Paquelin cautery, dividing the muscle deeply at several points.

Third. Cases resulting from the division of comparatively small perineal fistulæ in women, in which the incision has involved the decussation of the vaginal and rectal sphincters. For this condition he recommends Mr. Tait's operation on the perineum, or else the same treatment as in the last class.

As a matter of fact, it will be found that the best surgeons will have the fewest cases of incontinence laid to their charge. When that unfortunate result has been reached, as it may be by the best operator, there is still much to be gained by a carefully considered plastic operation of the general plan proposed in the first class of cases; or, failing in this, it is often possible to produce an artificial anus with the cautery which shall be an improvement on the condition of absolute incontinence.—*Med. Press and Circular*, May 23, 1888.

Zeller on Deep Perirectal Abscesses. — These abscesses are either above or below the levator ani muscle, and generally situated either laterally or anteriorly in relation to the rectum. Those located above the levator ani may start in the prostate or surrounding connective tissue.

In the prostate they begin either as isolated small foci, flowing together, and finally connecting the entire gland into one large abscess. They are the result of gonorrhœal infection, violent catheterization, or inflammation spreading from the gut through the many lymphatics and blood-vessels. Some of them were due to infection from ulceration of the rectum, and others are tubercular in character, gravitating toward the rectum instead of the psoas muscle. Many are of very doubtful causation.

The diagnosis is generally easy, if symptomatology leads to a rectal examination. Regarding the termination of the abscess, Segond has collected important statistics: 35 perforated into the urethra and 77 elsewhere, generally into the rectum but occasionally into the perineum, the inguinal region, the ischio-rectal fossa, and the obturator foramen.

The prognosis of these deep collections of pus is not favorable. Twenty per cent. of them were fatal, and many leave fistulous communications with urethra or rectum which are never cured.

The usual treatment of these abscesses has been to incise them from the rectum when they have pointed in that direction, but Zeller advocates a perineal incision wherever possible, even after pointing has taken place in the rectum. He objects, very properly, to the incision through the rectum that it is too small, does not tap the abscess at its most dependent part, is not free from risk of hemorrhage, and does not prevent the formation of a urethro-rectal fistula, which is much more intractable than a urethro-perineal fistula. The perineal incision is certainly more surgical when it is practicable, but it is not always possible to reach the abscess in this way. The writer recalls several cases in his own practice of large collections of pus high up in the pelvis which could only be opened through the rectum at a point above the prostate. None the less if by rectal examination it seems at all possible to reach the abscess by a dissection from the perineum it should always be attempted. After the skin incision, no cutting instrument should be used in such a dissection, but rather a stout pair of dressing-forceps.—*Beiträge zur klinischen Chirurgie Mittheilungen aus der chirurg. Klinik zu Tuebingen*, Band iii., Heft 2; also in *Annals of Surgery*, July, 1888.

THERAPEUTICS.

Laplane on Antipyrine in Diabetes Insipidus.—The patient was a man of thirty-six. He gave no history of alcoholism, malaria, or syphilis, and had enjoyed good health, although he was very thin. In December, 1887, he was struck in the occiput by the corner of a heavy case. A few days after he began to be very thirsty and passed large quantities of urine. He lost flesh and strength rapidly. On admission to the hospital in February he was passing thirteen quarts of water a day, which contained nearly two ounces of urea. He weighed only 94 pounds. Under the influence of the extract of valerian, 2 drachms a day, the water fell to ten quarts, containing a little over $1\frac{7}{10}$ ounces of urea. The patient also gained two pounds in weight. No further change taking place in several days, hypodermic injections of the arseniate of strychnia, gr. $\frac{1}{30}$th a day were given, producing no change in the urine but augmenting the weight by $2\frac{1}{2}$ pounds. In March this treatment was stopped and the patient was put upon antipyrine, gr. xv. three times a day. At the end of a week the urine had diminished to 7 quarts, the urea to $1\frac{1}{2}$ ounces, while the weight had increased 3 pounds. A few days later the patient was passing $5\frac{1}{2}$ quarts of water, containing only 5 drachms of urea. The patient gained much strength and insisted on leaving the hospital, although still passing from 5 to 6 quarts of water daily.—*Marseille Médical*, May 30, 1888.

Marshall (B.) On Antipyrine.—It is with this drug as an analgesic that the author chiefly deals.

In two cases of gout it seemed to cause speedy and lasting relief from pain. In one case, a male, the commencing dose was 25 grains; in the other, a woman, 10 grains were given every two hours. In one case the customary yearly trip to Europe was given up because of the prompt relief produced by antipyrine.

In a bad case of carbuncle, in which no operative steps were taken and a fatal result feared, 10 grains of antipyrine every hour, until 40 grains were taken, relieved both the pain and the inflammatory action about the carbuncle. A case of cerebro-spinal meningitis in a boy of eleven recovered under 5-grain hourly doses of the drug. In a bad case of dysmenorrhœa

20 grains at the outset and 10 grains every hour afterwards, until 60 grains had been taken, gave complete relief.—*Pacif. Med. and Surg. Jour.*, etc., July, 1888.

Porter (W. H.) On the Etiology and Pathology of Increased Bodily Heat in Relation to Disease and the Use of Antipyretics.—In an article on the above subject the author, after briefly calling attention to the mode of action and comparative utility and safety of medicaments usually employed as antipyretics, calls attention to a remedy which is old, but which, heretofore, has not been employed in combating fever. He says:

"The remedy which strikes strongest at one of the main sources of the increased temperature is pure ox bile, or the fel bovis inspissatum. The administration of bile causes the milk to curdle in fine flakes and be more perfectly digested. It prevents intestinal decomposition and stimulates a gentle peristalsis, which favors the capillary circulation of the intestine and increases the rapidity of absorption. The fel bovis also increases the perfection of the intestinal digestion, which, together with a more rapid circulation and peristalsis, causes absorption to be most perfectly accomplished. At the same time these favorable conditions decrease the amount of effete and irritating substances that can be drawn up into the system with the nutritious elements. As a result the liver receives a much larger quantity of pure nutritive substances and a smaller amount of irritating and deleterious matter; consequently the work required of the hepatic cells is lessened, and the nutritive pabulum reaching the system at large is better in quality, and the nutrition in general is kept at a higher standard. The resulting excretory products are necessarily more perfectly formed and are less irritating to the excretory organs.

"We now find the abnormal heat-producing power reduced to the minimum, less stored up, and the excretory organs better able to eliminate whatever increased heat is developed.

"In this way a nearer approach to the normal standard is maintained, the original poison is given less chance to injure thesystem, and it is easily and rapidly eliminated.

"These statements are especially true in connection with typhoid fever, and it has been a noticeable fact, both in my own cases and those of others who have followed this line of treatment, that the patients had less tympanites, less cerebral disturbances, and the temperature was maintained at a moderately low degree throughout the disease. Albumen and casts in the urine were rarely found, and when they did appear they were in small quantities.

"In pneumonia, where the temperature is largely due to continued absorption of the rapidly liquefying inflammatory exudation, increased storage, and decreased radiation of heat, the fel bovis inspissatum does not reduce the temperature to so marked an extent. But in so far as it improves digestion, absorption, and assimilation in general, it decreases the storage power and increases the excretion of heat, and thus brings down the temperature to a certain degree. Also, by improving nutrition, it increases the eliminating power of the excretory organs, and often prevents a fatal renal complication, or a sudden failure of the heart's action. The accomplishment of even this is of great advantage in all pyrexial states."—*Med. Record*, July 28, 1888.

Clapp (W. J.) on Tetanus Successfully Treated with Strophanthus.—A well-developed man of 23, developed unmistakable tetanus three weeks after a slight injury to the nail of the left little finger. Tabloids, containing 2 minims of the tincture of strophanthus were given every three hours, with the result of producing decided improvement in two days, and progressive convalescence in two weeks. The urine, under the use of the drug, became copious and clear, the spasms lessened, and the temperature lower.—*Lancet*, July 21, 1888.

Mc Laury on Extraordinary Tolerance of Morphine in an Infant.—When two months old, the otherwise healthy child began to develop hydrocephalus, becoming very nervous and irritable. When the child was six months old, the writer was advised by a physician whom he consulted in the case to give a thirty-second of a grain of sulphate of morphine at bedtime. This seemed to do well for a week or more; then it had to be increased so that at the age of seven months the child was taking quarter-grain doses. The doses of morphine were gradually increased, till at last the child was taking ten grains a day, and still crying for more. She died on May, 31, 1888, under the influence of chloroform administered by a nurse. Her age was eight months and seventeen days.—*N. Y. Med. Jour.*, July 21, 1888.

A New Material for Absorbing and Deodorizing Fæcal Matter and Urine.—Amongst the many materials that have been suggested and used from time to time for the purpose of absorbing and deodorizing fæcal matter, not one perhaps is so interesting to those engaged in sanitary science as common slag, which has puzzled for a long time many a practical chemist and engineer to know to what purpose it may with profit be applied. It is said to be extremely porous, rendering the soil more absorbent, and is also of manurial value on account of the notable quantity of phosphoric acid it contains. The following additional advantages are claimed for it: (1) The cheapness of the material, the cost being roughly estimated to be from $1.25 to $2.50 per ton, including crushing and carriage; (2) its supply being practically inexhaustible; (3) its porous property, which, independent of (4) its manurial qualities, renders it valuable to clayey soil. Dr. Redwood gives the following analysis of the material after use:

	Per cent.
Fixed inorganic matter, after ignition	71.78
Insol. silicious matter	60.50
Lime	2.85
Phosphoric acid	2.31
Organic matter, with ammonia and water	28.32
Ammonia, ready formed	.08
Organic nitrogen	.13
Equal to ammonia	.15

A sample was exhibited which had been in use five weeks ago, in which it was impossible to detect the slightest smell. The method of using it is similar to that adopted in the other earth-closets. The pan is first charged with a certain quantity of the crushed slag, and after use another quantity is put in, the total quantity necessary, according to the inventor, being a third less than ordinary dry earth—that is to say, six persons would require one third of a hundredweight of defecating matter per week. These claims are so strong that a careful trial of this method, and, indeed, of any new method which aims at the healthy as well as useful disposal of so great a nuisance, is well worthy the consideration of every sanitarian.—*Lancet*, July 7, 1888.

Treatment of Wounds by Continued Irrigation.—In the London Hospital a permanent apparatus has been put up in one of the accident wards, which is practically self-working. A large tank fixed in the wall is supplied with hot and cold water by pipes; a window in its side shows the level of the water and exposes a thermometer by which the temperature of the water is adjusted; from the tank, irrigating tubes pass to various beds, and after being used for irrigation in the manner described by Mr. Treves, the water is drained off by a pipe which passes into the basement. Two patients are at present under treatment by this method; in one case a stream of water has been running over a severe wound of the elbow produced by a crush, day and night without intermission for nearly three months, and the large wound is nearly healed. In the other case the wound, a severe crush of the hand with loss of much skin, compound fracture of several bones, and exposure of some carpal joints, is also doing well.—*Br. Med. Jour.*, July 14, 1888.

Olmsted on the Antiseptic Treatment of Wounds on the Hand.—The following is the outline of the method used in my cases.

1. The hand and forearm of patient are thoroughly washed with (*a*) soap and water and brush; (*b*) alcohol; (*c*) bichloride solution, 1-1000.

2. Towels wet with 1-2000 bichloride solution, and placed under hand and around forearm.

3. Instruments are soaked for fifteen minutes previous to use in a 5 % solution carbolic acid.

4. Ligatures and sutures are fine, Nos. 0 and 1, and soaked in 1-2000 bichloride solution containing 25 % of alcohol.

5. If a finger is to be amputated, cocaine (3 ss. of 4 % solution) is injected, and circulation arrested by a rubber band which has previously been sterilized.

If the wound is a clean incised one it is cleansed, sutured, and sealed with a solution of iodoform in collodion (3 i iodoform to ℥ i collodion). The dressings consist of protective, iodoform, moist bichloride gauze, bichloride cotton, splint and bandage.—*Canadian Practitioner*, July, 1888.

Seiple (W. G. M.) on a Curious Phenomenon Occurring during the Amputation of an Arm under Profound Anæsthesia.—William S., aged forty-eight, railroad employé, was thrown while stepping from a moving train, and had his left arm, above the elbow, crushed to a pulp, necessitating amputation at the junction of the upper and middle third of the humerus, which was immediately performed by me, assisted by Dr. C. T. Horn

and Dr. Sittler. After having removed the arm, and while taking up the arteries, I noticed a protrusion of the internal cutaneous nerve, about three-fourths of an inch, and as I always remove an extra portion of the nerves, which I may notice protruding, to prevent the liability of their being involved in the cicatrix, I grasped the nerve with forceps. As quick as a flash there was contraction of the portions of the muscles remaining, drawing them all up tightly into the axilla, leaving the bare bones protruding about three inches. The contractions were so firm and so quick that my tourniquet dropped off and left me without any protection as to hemorrhage. But after hastily examining the stump, I found the contractions so firm that not a drop of blood escaped. And now, how to get all this in position again. After a moment's hesitation, I had an assistant compress the subclavian, while I firmly grasped the shoulder with both hands, and by powerful pressure backward and suddenly bringing both hands forward, the parts sprang back into their proper position again. I immediately looked for the brachial artery to tie. I did not find it in its usual position; while looking, it gave a great spurt, when I found it on the under and outer side of the stump. After it had spurted the second time I succeeded in catching it with an artery clamp, and had an assistant tie it. No furthur trouble followed, and the wound healed kindly in about ten days under strict antisepsis. My impression and teachings so far have been that sensation being deadened by anæsthesia (in this case under thorough anæsthesia), reflex motion was also held in abeyance. Yet this case seems to prove the contrary. I would be pleased to have some of my professional brethren enlighten me concerning this peculiar condition. In all my researches I have not found a similar case on record.—*Medical Record*, July 21, 1888.

MISCELLANEOUS.

Thompson (J. H.) on a Case of Caries of the Spine with Angular Curvature, in Which the Spine was Trephined to Relieve Pressure on the Cord.—John O——, aged seven years, was admitted on July 25, 1887, for angular curvature of the spine. There was a family history of phthisis. He had always been a delicate child, and had a history of lung affections. Disease of the spine was noticed about seven months before admission.

When admitted there was a marked angular curve in the mid-dorsal region, with some lateral thickening; there was also paresis of the lower limbs. The muscles of the right lower extremity were wasted, and when at rest the limb was involuntarily drawn up. The condition of the patient became gradually worse, and on September 14, 1887, was as follows: The muscles of the lower limbs were in a state of tonic contraction with marked flexion, which was more easily overcome on the left side. The plantar reflexes were exaggerated, the cremasteric very feeble; the deep reflexes could not be obtained. The feet were slightly swollen and cyanotic, both symptoms being more marked on the right side. There was analgesia extending from the level of the eleventh rib on the right side to about the middle of the leg; below this point there was anæsthesia. There was no hyperæsthesic band. On the left side sensation was normal.

Notwithstanding the application of all the usual methods of treatment—viz., absolute recumbency, the administration of hydrargyrum cum creta and of iodide of potassium (the latter in gradually increasing doses, up to fifty grains, three times daily), and the application of the actual cautery, which were all given a fair and prolonged trial,—the condition of the patient became worse. The anæsthesia gradually extended upward to the level of the eleventh rib on the right side; on the left side, also, decrease, and finally loss, of sensation became developed, the anæsthesia extending from the toes to the level of the pubes; and thence to the line of the eleventh rib a condition of analgesia existed. Not the slightest voluntary movement could be made with either limb; there was also incontinence of urine and fæces. No sign of any abscess was found. It was decided to open the spinal canal, and, if possible, relieve pressure.

Operation.—On January 26, 1888, an incision about four inches in length was made along the line of the most prominent spinous processes, and the soft parts on each side separated so as to expose the osseous surfaces. Three laminæ were divided on each side, and were removed

with their attached spines, uncovering the theca of the spinal cord, which, at the lower part exposed, was found surrounded by a buff-colored, tough, leathery substance; this was cut away with scissors. The cord did not appear to pulsate, but no point of constriction could be found. The muscles were brought together by deep sutures of catgut, and the skin with waxed silk; a small drainage-tube was left in. The wound, having been dusted with iodoform and boracic acid in equal parts, was dressed with sublimated wood-wool wadding. Careful antiseptic precautions were observed before and during the operation. The trunk was supported by a special iron splint. The wound healed rapidly by first intention except at the drainage-opening, which, however, also quickly closed. No change was noticed until February 7th, when pin-pricks could be felt about three inches below Poupart's ligament on each side. Nine days later there was slight voluntary flexion of the left thigh, and on February 17th distinct voluntary contractions of the right quadriceps extensor was observed. On the 20th pin-pricks could be felt as far as the knees, and both thighs could be slightly flexed. On the 21st pin-pricks could be felt in the left foot, but on the right side there was no return of sensation below the knee. No further improvement took place, the condition of the patient remaining *in statu quo* until March 17th, when the area of the anæsthesia was found to be increased, and a few days later was practically the same as before the operation; about the same time he lost all power of voluntary movement in the lower limbs.

This case demonstrates the possibility of safely exposing the spinal theca, and, although only temporary and imperfect relief was afforded, appears to justify the hope that operative procedure may give permanent relief in similar cases. It is of course doubtful whether the paralysis was entirely due to the pressure of the lymph that was found lying on the theca; it is possible that an abscess in front pressing upon the nerves may also have been present, but it was not perceptible. The child is now (June, 1888) at home, practically *in statu quo*, and the question arises whether any further operation is worthy of trial. The brief summary of the case given above is thought to be of sufficient interest to be recorded, especially now that the question of spinal surgery is again brought forward.—*Lancet*, July 14, 1888.

Examination of Sputum.—While examining some sputum with Dr. Gibbes' staining solution for bacterium tuberculosis, Dr. Grün found objects in the sputum which he was unable to distinguish from bacterium tuberculosum. Not feeling quite satisfied, however, he took some tragacanth mucilage, and subjected it to the same processes as the sputum had previously undergone. On microscopic examination, he found that the tragacanth specimen contained exactly the same bodies as he had previously been unable to distinguish from bacterium tuberculosum, and which must have been derived from the staining solution. It is interesting to learn how easily mistakes may arise when dealing with these bacteria.—*Lancet*, July 14, 1888.

Slaviansky-Grenstrand on Pregnancy with Unruptured Hymen, and Delivery through the Perineum.—The patient complained of a rupture of the perineum, which had happened during her confinement. She was 23 years of age, and menstruated for the first time at 16, the periods being regular and free from pain. She was married in February, 1886. Coitus was always painful, and never gave rise to any sexual satisfaction. She had never lost any blood consequent on connexion. She soon became pregnant, and experienced the usual troubles incidental to maternity. She felt the movements of the fœtus in the beginning of July. On December 12th, labor began, and some hours later, the midwife in attendance ruptured the membranes and delivered her of a diminutive male child still living. The moment of delivery was accompanied by an extremely sharp pang, and she felt something give way. The child was born through a central rupture of the perineum. Delivery was followed immediately by a smart attack of hemorrhage, which was checked by pressure on the uterus. Considerable œdema of the perineum persisted for about a week, but there was no trouble of micturition. The menses reappeared six weeks after delivery.

The patient was a badly nourished woman, with undeveloped breasts and deformed thorax. The dimensions of the pelvis were as follows: Between the trochanters, 12¼ inches, between the ischii,

3¾ inches ; external conjugate, 6¾ inches; An examination of the external genital organs showed a circular orifice with inflamed and thickened edges in the centre of the perineum, which permitted the passage of the index finger without difficulty. A probe introduced through this orifice passed through the lower part of the posterior wall of the vagina, and came out at the vulva, There was no communication with the rectum. On separating the labia majora, a circular hymen was seen, perfectly intact and strengthened by a median band rnnning from above downwards and dividing the membrane into two parts, the left being the larger division.—*Medical Press*, July, 1888.

Endocarditis.—The only recent novelty in the study of endocarditis which has come to our notice is a paper by Landouzy and Siredey (*Revue de Médecine*, Sept. and Nov., 1887), confirming Dr. Barié's conclusions (published in the same journal in 1884), in attempting to prove that endocarditis and arteritis are frequently caused by typhoid-fever. Such connection would require much corroborative evidence before it can be accepted. It is well, however to bear their views in mind in the future in the study of the many obscure cases of diseases of the heart and vessels which present themselves. We know from clinical experience that valvular lesions frequently persist for years without change, as far as we can determine from physical signs and symptoms. We know also that sometimes lesions increase in gravity with greater or less rapidity, and the prognosis in a given case may be a very difficult matter to determine. We can pretty safely assure a patient who has passed through an attack of acute rheumatism with a slightly damaged valve that it may never be a matter of importance to him unless he has other attacks of rheumatism, though we cannot exclude the possibility of rheumatic endocarditis without joint symptoms which may be overlooked. We can pretty safely assure the friends of a patient with septic endocarditis that the case will terminate fatally. But there are many cases in which the etiology is very obscure, and in which prognosis is correspondingly difficult. As a basis of both prognosis and treatment, more extensive and definite knowledge than we have concerning etiology of valvular lesions is much to be desired. We may class the known causes of endocarditis in two groups, the specific and the non-specific. The former includes the poisons of rheumatism, of most infectious diseases, and septicæmia. The latter, cardiac strain, gout, senility, and depressing agencies generally. Possibly it would be better to speak of the effects of the first named as inflammations, of the latter as degenerations. As the other effects of a specific disease, such as scarlet-fever, as a rule pass off, it seems probable that an endocarditis excited by its poison would cease to be active with due convalescence of the patient, and the resulting lesions pass into the non-progressive category. But the etiology in a given case may be complex. The non-progressive lesion from scarlatinal endocarditis may render the valve liable to septic infection or rupture. The etiological importance of some agents, such as syphilis, is undetermined. There are cases of progressive valvular lesions not so rapid in their progress as the septic cases, but apparently running their course in weeks or months, which are difficult to class in any recognized category. Recognition of complex causation may clear up many obscurities. But there is still much to be done in determining the relative importance of causes of endocarditis already recognized, as well as, in all probability, in the discovery of others not yet determined.—R. VAN SANTVOORD, M.D.

Rickets and Syphilis.—Comby does not agree with Parrot's proposition that rickets only arises as the ultimate manifestation of syphilis. The "geographical" tongue, the scarred buttocks, eroded teeth, and natiform skull, are signs of an extinguished syphilis, according to Parrot and others. Hereditary syphilis attested by these marks would cause osteophytes, gelatiniform atrophy, and spongoid tissue, which suggest rickets. Comby contrasts rickets with syphilis. In the former, rarefaction of tissue occurs ; in the latter, condensation and softening. Scars and dental lesions are common in syphilis, rare in rickets ; corneal lesions are generally scrofulous ; lingual desquamation is not peculiar to syphilis. If infants who have been impregnated with syphilis are provided in due course with suitable food, they will not become rickety. In the etiology of rachitis, syphilis holds the same position as measles, variola, scarlatina, typhoid fever, and broncho-pneumonia.—*Lancet*, July 14, 1888.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of

CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital; CONDICT W. CUTLER, M.D., Instructor in Diseases of the Skin, Post-Graduate Medical School, New York; JOHN D. HAWLEY, M.D., Attending Gynæcologist, New York Hospital, Out-Patient Department.

VOL. V., NO. 33. August 16, 1888. WHOLE NO. 81.

CONTENTS.

	PAGE
Leading Article	389
Occasional Report on Syphilis and Dermatology	392
Occasional Report on Gynæcology	396
Therapeutics	399

LEADING ARTICLE.

Peabody (G. L.) On Two Deaths From Poisoning by Chlorate of Potash, with Autopsies.—It is somewhat remarkable that in the recent text-books on materia medica and therapeutics but little reference is made to the dangers attending the habitual use of the chlorate of potash. Binz [1] gives in full an account of these dangers, and Nothnagel [2] and Rossbach do also; but most of the books generally accessible in this country make only passing allusion to them.

In my cases death seemed to be the result of the effects of several conjoined lesions. The potassium element in the compound seemed to produce the usual heart-depressing effect of the potassium salts, and very great feebleness and frequency of the pulse resulted. The specific effect upon the hæmoglobin, in consequence of which it was largely changed to methæmoglobin, was very distinctly manifested in the dyspnœa and the altered color of the victims. Methæmoglobin is incapable of assimilating and transmitting oxygen, and hence, though respiration be full and frequent, the evidences of defective oxidation become manifest. One of these, in my cases, was fatty degeneration of the heart-muscle; another, cyanosis. Another, and a very prominent lesion, consists in the more or less complete blocking up of the renal tubules with masses of disorganized blood-cells and methæmoglobin, in consequence of which complete suppression of urine results, with the usual clinical picture of uræmia. This latter is commonly, but incorrectly, regarded as the result of an acute nephritis. There is no nephritis produced by this poison; but suppression, which is often complete, is brought about by the mechanical obstacle to the egress of urine rather than by a structural lesion of the kidney.

Death seems to result, then, from these combined causes: namely, feebleness of the heart, dyspnœa, and suppression of urine.

If I should be called upon to treat a bad case of poisoning by this agent early enough to warrant it, I think I should proceed as in a bad case of poisoning by coal-gas, *i.e.*, I should free the blood of as much of its offending contents as possible by copious venesection, and immediately replace the damaged blood by healthy human blood. It is plain that infusion of salt solution, under such circumstances, would be useless.

A woman of twenty was admitted to the New York Hospital on April 10, 1888, at 4 P.M. She had taken on the previous evening two tablespoonfuls of chlorate of potash by mistake, having intended to take a dose of Rochelle salts. Her temperature at the time of her admission was 99° F., her pulse was 136, and her respiration was 32. Her surface was very cyanotic, her face being nearly purple in hue. No attempt was made to wash out the stomach, inasmuch as fourteen hours had elapsed since she had taken the poison, and she had vomited freely. Her breathing, though rapid, was not labored, and there

[1] "Vorlesungen über Pharmakologie," Berlin, 1886.

[2] "Artzneimittellehre," Berlin, 1887.

was apparently no subjective dyspnœa. After she had been put to bed she lay usually quiet, but at times she would become quite restless, tossing about in the bed and rolling from side to side. After a short period of restlessness she would again subside into a quiescent condition. Her pulse, though not very rapid, was very feeble, and it was thought necessary to resort to pretty active stimulation.

She was given whiskey, fluid extract of digitalis, and tincture of strophanthus, by the stomach; and later, the two former were given subcutaneously. She had vomited much prior to her admission to the hospital and was nauseated when she was brought there, and vomited abundantly a bile-stained fluid after her arrival. As anti-emetics there were given ammonia, with cracked ice, sodium bicarbonate, and cerium oxalate. Mustard-paste was applied to the epigastrium, and her feet were soaked in hot mustard-water. The success attending these procedures was not very great.

At 6 P.M. her temperature had risen to 104°; her pulse and respirations were not materially changed. During the night attempt was systematically made to stimulate her heart with whiskey and digitalis, both internally and subcutaneously, and, as her extremities became cold, hot bottles were applied to her feet. During the night her bowels moved three times, the fæces being always of a dark-brown color and of semi-solid consistency. Urine was passed involuntarily; this also had a very dark chocolate color. A few ounces of urine were obtained by catheter. It presented a similar appearance. It was found to contain many blood-cells and large masses of altered hæmoglobin, and much albumen.

The next morning her temperature had fallen to 99.4°; her respiration and pulse had diminished in frequency and improved somewhat in character. By noon, however, this apparent improvement in pulse had disappeared and the heart was again profoundly weak. In the afternoon her temperature again rose, and reached 101.2° at three o'clock. At this time oxygen gas was given freely, without any improvement resulting either in her color, pulse, or general condition.

I saw her at this time, and was impressed by the very extraordinary color of her skin and conjunctivæ and lips, as well as by the very great restlessness which she manifested. The combined effects of intense anæmia with a cyanotic hue apparently beneath the surface, together with a very distinct sepia-brown or chocolate tint where the epidermis was thin, produced a most remarkable and unusual effect. She was at this time very restless, and constantly tossing about the bed. Her pulse was perceptible at the wrist, but was so feeble that it could with difficulty be counted.

She grew rapidly weaker, her respirations increased in frequency, and, though they were deep and full, and though she was allowed to inhale pure oxygen, as might be expected from the physiological action of this poison, there was no relief of the dyspnœa and no improvement in the patient's color. She slept steadily after this time, and died quietly at 3.35 P.M., thirty-seven and a half hours after she had taken the poisonous dose.

I made the autopsy twenty-five minutes after death. Her body presented the appearance of a well-nourished young woman. Rigor mortis was absent. There was some œdema of the legs. The color of the body was not materially changed by death, except that the cyanosis of the surface was less marked, and with the subsidence of the blood from the surface there appeared a slight hue of jaundice added to the anæmia and chocolate-color.

The site of the application of the mustard-paste, the epigastrium, was exactly marked out by subcutaneous hemorrhage. Instead of being merely bluish, it was of bluish-brown color.

The abdominal and thoracic muscles were of very dark-red color. The blood in the vessels of the neck and in the great vessels was all liquid, and of a very dark chocolate color. The clots in the heart were very soft and friable and of the same color as the blood in the vessels. The heart was soft and flabby. There was slight dilatation of the left ventricle, and fat was to be seen in the papillary muscles which control the mitral valve. The valves were competent, and the size of the heart was normal. The lungs were structurally normal, but their cut surfaces were very brown in color. The spleen was large, firm in consistency, and of a very distinct chocolate color. Exposure to atmospheric air caused no change in the color of the cut surface of this or any of the organs. The kidneys were large, their capsules not

adherent, their surfaces smooth, and of chocolate color. Both kidneys were found to be diffusely stained with the same chocolate-colored blood, and consequently the markings on cutting them open, were not found to be distinct. The blood in the brain was found to present the same peculiar discoloration as the blood elsewhere; but the brain and membranes were structurally normal. The stomach contained a pint and a half of a thick, dark-colored fluid, with a distinct admixture of bile; but in structure this viscus was normal. The solitary follicles were large, and Peyer's patches were pigmented; but otherwise the intestines were normal. The liver was normal in size; it was chocolate-colored, but not quite so dark-colored as some of the other organs. The bladder contained three ounces of urine, which was of a dark, brownish-black color, and very untranslucent.

There was a recent corpus luteum in the left ovary. Both ovaries were somewhat large. The uterus was normal; its mucous membrane was thick, soft, and velvety in appearance.

By microscopic examination the chief lesions of importance were found in the heart and kidneys. Very extensive fatty degeneration was evident in the heart, especially in the papillary muscles of the left ventricle. Many of the straight tubes in the pyramids of the kidneys were found filled, even to being distended, with broken-down blood-cells and methæmoglobin. This distension was often so great as to flatten the epithelium beyond recognition; elsewhere the epithelium was not altered in appearance.

A spectroscopic examination of the blood revealed the spectrum of methæmoglobin with great distinctness.

On April 27th of this year I made an autopsy in another case, at the request of Dr. W. A. Bartlett, of this city. To Dr. Bartlett I am indebted for the following history:

The patient was a strong, well-developed man, in active business, aged fifty-three. He considered himself in fair health until April 22d, although his family say that for several months he had not been quite well. He had complained of being easily fatigued, had had vague muscular pains, and had "looked badly." His face, they say, had been pale and waxy in appearance, and he had suffered from a "chronic throat trouble," for which he had long been using chlorate of potash.

This he had used both as a gargle and as an internal medication. After his death his servant stated that he had been in the habit, for at least two years, of buying the drug "by the pound," and "that he had used a dozen of those pound-cans during the past year." The last can was purchased only a few days previous to his death, and of it only a little had been used. He was also in the habit of carrying in his pocket a small box of lozenges made of this drug, and it was usual with him to allow them to dissolve slowly in his mouth.

On April 22d, on which day he became really ill, so that he was unable to attend to his business, he felt chilly and feverish all day. He complained especially of sore throat and pain in the back, and is known to have used more chlorate of potash than usual. He passed a very restless night.

On April 23d he was first seen by his physician. Then his pharynx was slightly congested, and swallowing was painful. His temperature was 102°; his pulse 100. There was very decided jaundice of skin and conjunctivæ. In the afternoon of the same day he vomited, and had several movements from his bowels. The matters vomited and passed per anum were not kept for the inspection of his physician, but were described by his family as having been of a very dark-green color, and as having contained blood. On the same day he passed about a half-pint of urine, which was black in color and untranslucent. His pulse then was imperceptible, he was restless, tossing about the bed, showing most of the symptoms manifested by a person who had suffered from a severe hemorrhage. At this time his color was a most peculiar and almost indescribable yellowish-gray, and he appeared like a man who was dying in collapse from loss of blood. The vomiting continued at intervals during the next twelve hours.

On April 24th he passed no urine at all, but his general condition seemed somewhat better. His temperature was normal, his pulse was of better character, and his strength somewhat restored. There was no more vomiting. His jaundice deepened somewhat. The mucous membrane of his mouth and pharynx was generally very pale, but here and there were to be seen areas of black discoloration.

Suppression of urine continued till his death.

On April 25th he was very feeble. His pulse had become weak and thready. His temperature was normal. Vomiting did not recur. As he passed no urine, an attempt to purge him was made by giving him twenty grains of calomel, and subsequently one fifth of a grain of elaterin. This medication did not cause his bowels to move.

On the next day, April 26th, he became steadily weaker, and decidedly drowsy. He could be easily roused during the early morning, however. His feebleness passed gradually into a condition of collapse, and he died comatose at 8 A.M.

I made the autopsy twenty-six hours after death.

The body was very decidedly jaundiced, and there was slight œdema of both lower extremities. Both pleural cavities contained very dark-colored serum. It was almost black in color, not transparent, and half a pint on each side. The pericardium contained the usual quantity of serum, but it was stained like that of the thorax. The heart was pale and flabby, and contained a large amount of fat in its muscular fibres; this was most distinct in the papillary muscles of the left ventricle. Besides these changes, it presented nothing of interest beyond the various degenerative changes of middle life. The lungs were moderately congested, and there was mucus in the bronchi. The spleen was large, at least six times as large as normal, and it was of firm consistency. Its cut surface was of very dark-chocolate color, and it did not become lighter or arterial in hue on exposure to air. The kidneys had a granular surface, but were not distinctly atrophic. The markings of their cortices were not distinct. Their color throughout was of a dark-chocolate hue, like that of the spleen. The stomach presented a somewhat thickened mucous membrane, but was otherwise unchanged. The intestines contained a large quantity of thick, dark-geeen material, which was of the consistency of thick gruel. The liver was somewhat darkly stained, but less so than the kidneys. It was of normal size. The gall-bladder was filled with thick, very dark-green bile. The urinary bladder contained two ounces of urine, which was almost black in color, and closely resembled the dark-colored untranslucent fluid which was found in the pleural cavities. The blood of the great vessels and heart was darker red than normal, and did not become at all arterial in color on exposure to air. It was in great part fluid. The microscopic examination of the organs was especially interesting. The kidneys showed very marked changes. The convoluted and straight tubules were very generally filled with dark-colored masses of altered hæmoglobin and broken-down red blood-cells. These masses were of irregular outline, and often appeared to overfill or distend the tubes, and in these situations the flattening of the epithelium was as plainly visible as in the other case. Occasionally tubes were seen only partially filled with similar material. The tubes often contained hyaline casts, but the changes seen in the parenchyma generally were but slight and of chronic character, and not related to his recent illness. The liver and spleen contained much altered hæmoglobin; in the former it was distinctly seen in the capillaries. The heart contained much fat in its muscle-cells. It was deposited in the form of fine granules, and very generally obscured their transverse striation, especially in the papillary muscles of the left ventricle.—*Medical Record*, July 21, 1888.

OCCASIONAL REPORT ON SYPHILIS AND DERMATOLOGY.

BY CONDICT W. CUTLER, M.D.

Causes of Malignancy in Syphilis.—M. Fournier gives six causes for malignancy in syphilis:

(1) Age. (2) Scrofulo-tuberculosis. (3) Alcoholism. (4) Malaria. (5) Hereditary predisposition. (6) Insufficiency of treatment.

Syphilis is especially grave at the two extremities of life. Acquired beyond fifty the prognosis is very grave, and beyond sixty the disease is characterized by tending to phagedæna, profuse and general symptoms, early appearances of gummata and cerebral symptoms; and lastly to a marked reaction upon the general health, prostration, cachexia, and loss of general strength and appetite. In the scrofulous, syphilis is very apt to take on the suppurative and rupial forms. It is among them

precocious gummata and massive adenopathies are seen. Alcoholism acts in predisposing to grave and precocious forms of syphilides, constant eruptions, cachexia, and cerebral syphilis.

Poverty is one of the causes of malignant syphilis, and it is among the poor that the worst forms of syphilis are the most common.

Nervous overwork is one factor of gravity for syphilis in directing its localization upon the brain and cord.

Fournier says that nineteen out of twenty cases of severe tertiary syphilis is the direct result of insufficient treatment, or no treatment at all.—Editorial, *Boston Medical and Surgical Journal*, April 28, 1887.

Hutchinson (J.) on Problems in Syphilis.—Phagedæna, or hospital gangrene, is more frequently the result of pernicious syphilis than neglect of hygienic precautions. An outbreak of hospital gangrene is frequently traced to contamination from a phagedænic syphilitic sore; and the disease is more prevalent in military hospitals, where such predisposing causes are peculiarly likely to be found.

It is not supposed that syphilis is also transmitted with the phagedænic inflammation —*British Medical Journal*, Jan. 9, 1886.

Bangs (L. B.) on the Limitation of the Contagiousness of Syphilis.—Dr. Bangs is convinced by the analysis of cases reported by M. Fournier: First, of the non-contagiousness of syphilitic sequellæ and so-called lesions of the tertiary stage. Second, that the limit of the contagious stage of syphilis may be put within five years.

Hutchinson does not think any case of actual contagion can be proven after two years.

Dr. Otis thinks the period of contagiousness might be placed at three years, and that the virus in the blood does not remain potent for contagion after the primary and secondary lesions.—*Cincin. Lancet-Clinic*, May 10, 1888.

Eve (F. S.) and Lingard (A.) on a Bacillus in Syphilis.—With improved methods of demonstration, bacilli were found in twelve primary sores, three cases of indurated glands, two cases of gummata, papular syphilide, and in condylomata; also in the blood of two syphilitic patients, and in the tissues of three others. It is differentiated from the bacillus described by Alvarez and Travel as occurring in normal smegma, to which it bears close resemblance by being decolorized by nitric acid after staining with fuchin.

Inoculations of monkeys with cultivations of this bacillus has so far proved unsuccessful; but so also have inoculations with chancres and phagedænic sores.—*The Medical Abstract*, May, 1888.

Miller (of Moscow) on the Earliest Symptoms of Inherited Syphilis.—Attention is particularly called to fissures of the lip, especially the upper lip.

Parrot regards such as unmistakable signs of hereditary syphilis. It certainly forms a very frequent and early manifestation. The very earliest fissures on the upper lip are generally two, placed symmetrically on either side of the central portion. Relatively nearer are fissures on the lower lip. When such do occur there is usually only one, and that in the centre of the lip; but afterward others may occur, and uniting, form ulcers. They are very painful, difficult to heal, and leave white scars, which are very persistent.—*Edinburgh Medical Journal*, July 1, 1888.

Ravogli (A.) on Syphilis Ulcerosa Cutanea.—The author draws the following conclusions:

1. Syphiloderma ulcerosum, syphilis ulcerosa are expressions which do not give any substantial idea of the age and of the malignity of syphilis. The word ulcer must be accompanied with the elementary form which produced ulcer, as syphilis papulo ulcerosa, tuberculo ulcerosa, gumma ulcerosa.

2. Syphilis is controlled by the mercurial treatment to the stage of tuberculo ulcerosa, but when it arrives at the gummatous condition mercury has no more effect.

3. That a regular and rational treatment in the secondary stage is the only protection for the late consequences of this disease.

4. Every thing which diminishes the vitality and the vigor of the body adds to the power of syphilis.

5. Mercurial treatment in the mother while pregnant has beneficial influence on her offspring.—*Cincin. Lancet-Clinic*, May 28, 1887.

Bronson (E. B.) on Preventative Treatment of Primary Syphilis.—The plan recommended consists in the local use of antisyphilitics brought in direct

communication with the affected region, especially the initial lesion and diseased glands. This consists simply in the hypodermic injections of mercurial preparations in or about the lesion and glands. Most efficient and the least irritating has been found the bichloride of mercury, one part in four or five hundred of mucilage and water, with a little common salt added. Of this four or five injections are made, of four or five minims each, every day or every second day in and about the affected ana. With these injections inunctions of mercurial soap may be employed in the same region.—*New York Medical Journal*, March 24, 1888.

Lang (Prof. R.) on the Use of Gray Oil in Syphilis.—Recognizing the curative property of metalic mercury in syphilis as applied externally, the subcutaneous injection suggested itself. The preparation used was :

Mercury,
Lanolin āā, 3 parts,
Olive oil, 4 parts.

This preparation is called "gray oil," and ordinary cases of syphilis require no more than two minims injected in two places (buttocks or back) every five or eight days. In two or three weeks the quantity injected may be diminished and intermitted for two weeks or more.

The advantages of using this form of treatment are :

1. Equal distribution and actual dosage.
2. Convenience of the application.
3. Slight reaction. In no cases did suppuration occur.
4. Efficient and permanent results.

There is no pain at time of injection, but next day there is a little induration, which disappears in a few days.—*Medical Progress*, June 23, 1888.

Wilson (J. C.) on the Treatment of Syphilis by the Hypodermic Injection of Calomel.—The advantages claimed by this method of treatment are :

1. Absence of any digestive disturbance.
2. Precision of dosage.
3. Control of the administration by the physician.
4. Promptness of action.
5. Cleanliness, convenience, and safety.
6. Rapidity with which skin lesions and other rebellious symptoms disappear.

The disadvantages are :

1. Pain.
2. Danger of the formation of abscess.

The pain is often quite severe, coming on soon after injection and lasting for some time. The danger of producing abscess is much lessened by injecting the calomel deeply into the muscular substance. The calomel is best suspended in pure glycerine, and one grain being the usual dose.—*The Medical News*, June 2, 1888.

Sturgis (F. R.) on Venereal Diseases of Children.—The larger percentage of cases of inherited syphilis appear at or before the third month of extrauterine life. It is seldom that syphilitic manifestations appear earlier than the sixth week, but usually between the sixth and eighth week after birth. If no symptoms appear within the first year the child may be considered free from syphilitic taint. The child may be syphilitic but appear perfectly healthy at birth. The first manifestations of the disease may disappear in a short time even without treatment, but are quite sure to make their appearance again, though frequently not for ten or twelve years, so if late symptoms show themselves previous ones have certainly existed.—*Arch. Pediatrics*, Feb., 1888.

Hughes (C. H.) on Eczema as a Nervous Disease.—Eczema is often seen in the course of central nervous trouble, especially of a highly emotional type with implication of the vaso-motor system. Eczema is generally a vaso-motor emotional neurosis, and where dermatological treatment is without avail that directed toward the nervous system is often curative. Mr. E. Nelson[1] says : "Constitutionally disturbed nervous function, however induced, by producing disturbances of the circulation and nutrition of the skin, is among the commonest causes of eczema." "That eczema is powerfully under the influence of the nervous system is shown by the sudden and sometimes periodical exacerbations of the symptoms and their subsidence under the influence of agents which soothe and tranquillize the nerves." The prognosis is dependent upon the degree of nervous irritation and exhaustion. As regards treatment the chief reliance has been galvanization of the sympathetic system from the head down and general application of static electricity. — *New England Medical Monthly*, May 15, 1888.

[1] Quain's Dictionary.

Dubois-Havenith on Dermatoses Following Mental Shock.—A lady after witnessing a violent assault upon her husband, was much prostrated by the fright, and three weeks later a bullous eruption, having the characteristics of foliaceous pemphigus, and accompanied by incessant pruritus, made its appearance. Another case was a little girl, who was rescued from burning, and remained for some time in a condition of prostration from fright. A month afterward a pemphigoid eruption made its appearance on the body, disappeared under treatment, but reappeared again several times. A third case was that of a woman who became very much excited in a quarrel with her husband. A few days afterward an exudative erythema made its appearance on the arms, hands, and feet, and vesicles on the lips. E. de Smet has recorded cases of purpura hemorrhagica from the same cause.—*Medical Progress*, May 12, 1888.

Tait (Lawson) on Urticaria Diffusa Occurring After Ovariotomy.—After nearly all kinds of abdominal section, acute attacks of urticaria occur in some seven per cent. of the cases. It seems sometimes to come in outbreaks, making its appearance in seven or eight cases, one after the other, in a very short space of time. The symptoms, although occasionally severe, never give any cause for anxiety, and the administration of a saline purgative generally causes them to disappear.—*British Medical Journal*, June 9, 1888.

Gunthermann (P.) on Purpura Hemorrhagica from Ingestion of Coa Oil.—A five-year-old boy swallowed an ounce of coal oil, and a few days afterward blotches of all colors of the rainbow made their appearance on the body. At the same time the child suffered with repeated and serious attacks of epistaxis—lost all appetite, and became anæmic, emaciated, and droopy.

The skin lesions consisted of stigmata, petechiæ, vibices, and ecchymoses, which covered at least one third of the surface of his body. None were found on the mucus surfaces.

Under treatment by ergot, iron, and lime juice the boy made a rapid recovery, —*The American Practitioner and News*, May 14, 1888.

Jameson (W. Allan) Erythrasma.—This name is applied to reddish-brown scaly patches found on the inner surface of the thigh, where the scrotum comes in contact with it, and on the corresponding surface of the scrotum. This affection seems allied to intertrigo, but differs from it in that inflammation is no necessary part of the disease, and also in the constant presence of parasitic fungi or bacteria.

More than one form of parasitic vegetable organism is always present. Dr. Payne has always found present cells of *trulla* or *saccharomyces*, organisms frequently present in scaly skin affections. Peculiar threads, something like the mycelium, called *microsporon minutissimum*, are frequently present and numerous micrococci. The disease is therefore probably parasitic and favored by the moist conditions of parts in question.—Edinburgh *Med. Jour.*, June, 1888.

Elliot (G. T.) on Tuberculosis Cutis Verrucosa. — The patches resemble a group of irritated warts, and vary in size from a pea to a silver dollar. They are round or oval, or may coalesce and have a serpiginous appearance. Each plaque is surrounded by a narrow erythematous zone, on which there may be small pustules or crusts. The central portions are elevated and warty, and pressure causes the appearance of a little pus. Involution takes place slowly but spontaneously. Microscopically the morbid changes are those of tuberculosis. Bacilli are abundant. The pus comes from small sub-epidermal abscesses, which do not contain bacilli, but staphylococci. The disease differs from lupus in occurring usually upon the hands, and in adult life, starting from the unbroken skin and never ulcerating, but undergoing spontaneous involution. The disease is supposed to be the result of inoculation. —*Cincin. Lancet-Clinic*, May, 1888.

Gärtner (G.) and Lustgarten (S.) Electrolysis for the Treatment of Lupus Vulgaris.—The current used was from a strong battery—24 Leclauché elements. The positive pole represented by a sponge electrode applied to the arm of the patient, and the negative or cautery electrode, pressed upon the diseased portion of the skin.

The part to be operated upon should first be smeared over with soap liniment. A gentle but regular current, rising from 5 to 8 milliampères, is usually all that is required, and should last about ten minutes. With the exception of a little burning sensa-

tion, the operation is almost painless. After the electrode is removed, the cauterized parts are excoriated, sodden, and discharge a strongly alkaline fluid. The diseased parts should be dressed with iodoform. If the lupus is superficial this method of treatment is curative, but if deeply seated other forms of treatment are more satisfactory.—*The Medical Press*, Feb. 2, 1888.

Unna (P. G.) on The Treatment of Acne.—The treatment of acne has to fulfill two indications—to loosen the corneous layer, and to destroy the microbes. The horny layer can be best removed by means of sulphur and resorcin, while the hyperresulting æmia is lessened by applications of zinc oxide. Resorcin is better than sulphur, because with it can be combined corrosive sublimate, the best agent for destroying the micro-organisms, while the other destroying agent, carbolic acid, goes best with sulphur. Every acne patient should wash frequently with soap and hot water—hotter the better—and two or three times a week the whole affected surface should be gently scraped, the pustules punctured, and the comedones pressed out. Use the following lotion during the day:

℞	Hydrarg. bi-chlor. corros. .	0.1 parts.
	Glycerini	1.0 "
	Aqa. flor. aurant. . .	20.0 "
	Spiritus	80.0 "
M.		

And this paste at night:

℞	Nug. zinci benzoati . .	86.0 parts.
	Resorcini	10.0 "
	Terræ siliciæ . . .	4.0 "
M.		

To prevent the recurrence, a weak resorcin paste, or better still, the constant use of sublimate of mercury soap will be found beneficial.—*Edinburgh Med. Jour.*, May, 1888.

Shoemaker (John V.) on Massage in the Treatment of Skin Diseases.—In dermatological practice, I regard massage as one of the most helpful agents at my command. In scaly forms of seborrhœa it is of great advantage by restoring circulation and promoting absorption. In indurated acne it relieves congestion and opens the clogged absorbents. The same is true of pigmentary deposits. It may be used to advantage in sub-acute and chronic eczema. It is a valuable aid in promoting oxidation in psoriasis and scrofuloderma. It acts either as a sedative or counter-irritant, accordingly as it is applied gently or powerfully. Massage of the skin should be a *crescendo* movement, beginning with a gentle touch of the hand, and increasing in force and frequency as adapted to each individual case. If used with skill and discretion there are but few cases in which massage can fail to do good.—*Medical Times*, June 15, 1888.

Thompson (John). A New Antiseptic Soap.—Of all the mercurial salts, only one of them resisted decomposition when introduced into soap; this was the biniodide, the most powerful antiseptic salt of mercury. This salt combines with all kinds of soap, without losing its antiseptic properties. These soaps have been tested by bacteriologists, and found that septic material was rendered perfectly aseptic in ten minues. In skin diseases produced by the fermentation of accumulated secretions, the treatment by this soap has met with the most marked success.

In all parasitic skin diseases, such as favus and ringworm, this soap is curative.

The biniodide soap contains from one to three per cent. of the salt dissolved in iodide of potassium.—*Medical News*, June 30, 1888.

OCCASIONAL REPORT ON GYNÆCOLOGY.

BY JOHN S. HAWLEY, M.D.

Emmet (T. Addis) on the Use of the Vaginal Tampon in Certain Conditions Following Pelvic Inflammation.—The conditions which are relieved by the use of the use of the vaginal tampon are those in which prolapse of the uterus and a dilated state of the veins of the broad ligament are prominent factors. Experiment, by making traction on the tissues surrounding these veins, shows that when their normally tortuous course was changed to a straight one there was an immediate increase of their calibre and consequent congestion, while the arterial circulation was not affected by such traction until it exerted a force equal to that produced by procedentia of the uterus. These veins, being destitute of valves, will always become varicose if deprived of the support afforded by the elasticity of the surrounding tissues, or when the force of the circulation and of gravity is not antagonized by the obstruction caused by this tortuous course. Descent of the uterus, by straight-

ening their course, causes dilatation, and finally permanent varix, as will any injury received during parturition, if the elasticity of the tissues be destroyed in consequence. The same result may follow the contraction of the tissues of the uterine ligaments when these have been the seat of peritonitis, and it is in such cases alone that the tampon is of value as a means of treatment. If the uterus be lifted to its normal level, and artificial support be given to the distended veins, an opportunity is afforded to the tissues of the uterine ligaments to regain their tone, the venous circulation is restored to its normal condition, and the varicose veins may ultimately be occluded by the organization of their contents.

The tampon, if used in improper cases, may do much harm, and therefore must be employed with the greatest care. Only in cases showing no symptoms of existing inflammation is it to be used, and even then in a most circumspect manner. Packing the vagina while the patient is in the knee-chest position is wrong in principle, as the veins are put on the stretch by the over-reposition of the uterus, which is effected by this position ; and therefore the tampon should be applied while the patient is on the back. The knee-chest position may be employed to effect the reposition of the displaced uterus or ovaries, but only enough cotton should be introduced at the time to enable the finger to retain the organs in proper position while the patient is turning on her back. The remainder of the tampon is then introduced by the side of the supporting finger, which packs it into place in such a manner that support is given without undue pressure on tender points. The tampon is to be worn continuously, the necessary changes being made at frequent intervals by the physician, care being taken that the uterus be supported by the finger while the change is being made, as the success of the treatment depends on the prevention of any prolapse of that organ. During menstruation a thick gum-elastic ring pessary is substituted for the tampon, and the patient kept quiet in bed.

The most satisfactory results are obtained by the use of fine non-absorbent cotton, made into balls of the size of English walnuts and smeared with vaseline, which renders them still less absorbent, and preserves their elasticity for a longer time. Moreover, this facilitates the introduction of the cotton balls.

When employed in suitable cases, this treatment, if faithfully carried out, will yield most satisfactory results. Support, not pressure, is the aim of the treatment, for the former gives the relaxed tissues an opportunity to regain their normal elasticity and strength, while the latter only tends to reproduce the original cause of trouble.—*N. Y. Med. Jour.*, Feb. 18, 1888.

Alexander (Harriet) on the Boracic-Acid Treatment of Leucorrhœa.—Following the practice of Doctor N. F. Schwartz, of St. Louis, this method of treatment of leucorrhœa was employed with success in three cases. The genital canal is cleansed by a copious hot-water douche, the walls of the vagina dried with absorbent cotton, and enough of the crystals of boric acid introduced through a speculum to completely distend the vaginal vault and surround the vaginal portion of the cervix. The crystals are held in their place by a small tampon of absorbent cotton and a larger one of aseptic wool. Hardening of the cervix was noted after the second application.—*Med. Standard*, May, 1888.

Coe (H. C.) on the Use of the Curette for the Relief of Hemorrhage Due to Uterine Fibroids.—The conclusions reached are unfortunately based upon a very limited clinical experience, but are strongly supported by theoretical arguments, drawn from pathological facts. The examination of uteri, which are the seat of submucous or intramural fibroid tumors, reveals an hypertrophied condition of the mucosa, and the pressure of fungosities, with atrophy of that portion covering the tumor when it projects into the uterine cavity, as a result of long-continued pressure of the growth. The metrorrhagia is caused, not by the tumor, but by this condition of the mucous membrane, the removal of which will at least arrest the hemorrhage for a time. This procedure should be employed in those cases of uterine fibroid tumor, in which hemorrhage is the prominent symptom, before radical measures are adopted. Many of the cases in which hemorrhage has been arrested by the use of electricity have doubtless been cured by the destruction of the hypertrophied mucosa by the cauterizing effect of the current. From personal experience and pathological investigation, the following deductions are made :

1. The hemorrhage in cases of fibroid

tumor of the uterus has its source, not in the tumor itself, but in the hypertrophied endometrium.

2. The hemorrhage is not directly proportionate to the size of the tumor, but to the extent of the mucous surface. Venous obstruction and the menstrual congestion in the mucosa are the chief active causes.

3. In certain cases the hemorrhage can be diminished for a considerable period by thoroughly scraping away the hypertrophied endometrium and repeating the operation as often as may be necessary to keep the menorrhagia under control.

4. Curetting is merely a palliative measure, but it may enable the patient to survive until she is relieved at the menopause, whereas radical operations too often result fatally.

5. Curetting in these cases should be regarded as an experiment, which, however, is so harmless and so frequently successful, that we are justified in giving it a fair trial before advising oöphorectomy, myomotomy, or supra-vaginal amputation.

6. The use of the curette requires no special skill. It is an operation for the general practitioner, and is much more rational than to allow the patient to become exhausted by repeated hemorrhages which medication and other palliative measures are powerless to control.—*N. Y. Med. Record*, Jan. 28, 1888.

Noeggerrath (Emil) on Cervical Laceration as a Cause of Uterine Disease.—Any evidence which formulates more clearly the indications for trachelorrhaphy is of value, as the influence of other causes for uterine disease is apt to receive too little attention when laceration of the cervix is found and credited with undue etiological power. A study of the histories of one hundred cases of uterine disease, fifty without laceration of the cervix, and fifty with bilateral laceration to the vaginal junction, has led to the following conclusions as to the influence of the accident on the many morbid conditions which have been ascribed to it. These records show, length of married life, age, number of children, position of uterus, condition of the cervix, and diagnosis of the disease. The conclusions reached are:

1st. Women with uterine disease are more likely to conceive when they have laceration of the cervix than when the cervix is uninjured; they are also less apt to abort.

2d. The position of the uterus is not influenced by lacerations.

3. There is no lengthening of the uterine axis as a result of laceration.

4th. Erosions and ulcers occur just as often upon unlacerated as upon lacerated cervices, and diseased cervical tissue is not more frequent when the cervix is lacerated than when it is not.

5th. Lacerations of the cervix exercise no influence on the development of uterine disease with regard either to their number or intensity.

6th. Eversion of the lips is never the direct result of laceration. An apparent eversion is caused by the use of the Sims speculum and the vaginal depressor, by traction on the vaginal walls. Except the time immediately after parturition, when the freshly opened blood- and lymph-vessels may dispose to hemorrhages and septic absorption, laceration has no further significance. The Cicatrices naturally offer very important therapeutic indications, occasionally, as causes of local pain, or (distant) reflex nervous disturbances; chiefly on account of hemorrhages and more extensive lacerations at a second labor. There is, however, no indication for restoring the laceration by the removal of a small piece of scar-tissue from the two sides. We should be clear on this point: that the restoration of the form of the vaginal portion as such can exercise no influence on the womb.—Translation in *Maryland Med. Jour.*, March 3, 1888.

Wells (Brooks) on the Etiological Relations of Cervical Laceration to Uterine Disease.—In answer to the article by Dr. Noeggerrath just quoted, the author submits statistics of four hundred cases of uterine disease in the practice of Dr. Mundé. The cases of laceration include those of the first and second degree of that injury, as well as the complete lesion, or third degree as the lesser, or partially healed tears are often accompanied with the most marked forms of uterine disease and reflex disturbances. His analysis of these cases leads him to conclusions diametrically opposite to those reached by Noegerrath. He points out several instances of possible misinterpretation by evidence furnished by the tables of the latter, and suggests that if the exact time of occurrence of the laceration could be determined, the proportion of sterile cases among those of

laceration would be increased. As to abortions, he shows that while *first* abortions are of nearly frequent occurrence among the lacerated and non-lacerated, that liability to *repeated* abortions is greater with the former class, and moreover, that this liability increases with the severity of the tear. He concludes that while undoubtedly the importance of cervical laceration as a factor in the causation of uterine and systemic disease has been somewhat exaggerated, there still remains a substantial bases of proven facts and indubitable clinical evidence to show that the profession in America have not erred in considering the condition one of considerable pathological value, and the operation for its relief logical and beneficent.—*Am. Jour. of Obst. and Dis. of Women*, March, 1888.

THERAPEUTICS.

Bories (E.) on Apomorphia and Antipyrin in Asthma.—A woman of fifty, married, has been an invalid for a number of years with asthma. She had been given various anti-spasmodics, but found only temporary relief. Nitrate of amyl., ether sulph., chloroform, etc., would all throw her into violent paroxysmal fits of asthma. Inhalations of pot. nitratis and pulv. stramonium made her much worse. I gave her a heavy dose of pot. iodide which served to relieve her considerably; was called two hours later, found her in a still worse condition than she was when first called. I injected $\frac{1}{12}$ gr. apomorphia hypodermatically. Within five minutes there was complete emesis, and my patient sank back on her pillow in a deep sleep, from which she did not waken for some four hours. She had no relapse for more than four weeks. Was called again of late; found my patient in a violent paroxysm of asthma. I at once injected $\frac{1}{12}$ gr. apomorphia. There was complete emesis and some sleep, but on awakening her paroxysm again returned fully as violent as before. She now complained of a severe frontal headache. I at once gave her 15 grs. of pot. bromide and four grs. caffeine citrate. The preparation gave her no relief; her headache was severe and the asthma attack agonizing; gave her 10 grs. of antipyrin. Within twenty minutes she felt relieved, headache was much easier and the asthma much better; left her a solution containing about two grains to the drachm, instructing her to take a dose every two hours till three doses were taken. It has been a month since the last attack, and during that time she has been entirely free from any attack. Since the above case came under my notice the same remedy was given in another case of asthma, with decidedly happy results.—*So. Cal. Pract.*, July, 1888.

Robb (J. T.) on an Idiosyncrasy with Regard to Antipyrin.—In a patient suffering from migraine I prescribed fifteen-grain powders of antipyrin. She had only taken one of the powders when she experienced the following symptoms, told in her own words. They were as follows: "On June 5th I woke with a slight headache and took a powder about half an hour after a light breakfast. About eight minutes after taking the powder I felt great nausea; then I had a most violent attack of sneezing, which lasted for some time, with temporary catarrh from eyes and nose. I also suffered from queer sensations at the back of my neck and up my head, extreme tightness of the chest and throat, with loss of voice and great difficulty of breathing. The headache had gone, and my head felt the best part of me. Gradually I got my breath back, and my chest and throat got relieved, but my voice was hoarse for the rest of the morning." There was no itching of the body, nor was there any rash as far as the patient knows. There was no coppery taste in the mouth, nor were there noises in the ears. The sickness from the migraine disappeared, and the headache did not return.—*Lancet*, July 28, 1888.

Shearer (J. Y.) on the Treatment of Peritonitis with Pilocarpine.—In 1885 I changed my treatment of peritonitis, giving, instead of opium, nitrate of pilocarpine. From the nature of the drug, and from its action, as results from its use in other cases unmistakably showed, I concluded that pilocarpine would accomplish in peritonitis what nothing else known to the profession would. I accordingly determined to use it.

On May 6, 1885, a woman of twenty-five was delivered of a very large child: a face presentation and a very difficult labor. On the day following I saw her twice. She then already had symptoms of peritonitis. On May 8th I found her very sick. She was weak and had a very high fever, with a

pulse of 120. Her abdomen was very much swollen and distended, and very sensitive to the touch. She had great pain. Her urine was scant and high-colored. Her skin was dry, and she had a great thirst for water. She also had vomiting-spells. There was no mistaking the disease I had before me—a genuine case of peritonitis. I ordered the following:

℞ Pilocarpinæ nitratis . . . . gr. i
Aquæ . . . . . f℥j
M

Of this she took a teaspoonful every four hours in a little water. The day following I found her much improved.

The first dose checked the vomiting, and after the third dose there was profuse perspiration. I also found an increase of urine and the patient had more rest. On May 10th she was decidedly improved. She had no pain and the swelling of the abdomen was very much reduced. She also had a natural movement of the bowels. Complete recovery occurred by May 15th.

Another case occurred in a woman of twenty-two, the result of a fall. The same remedy was administered with similar results. The vomiting stopped after the first dose. Food was again taken. The skin became moist, urine more free, and her pulse fell from 130 to 108. On the second day of treatment (the fifth of disease) the swelling of the abdomen was fast subsiding, pain and sensitiveness was less, and a natural movement of the bowels occurred.

Since using this remedy I have not lost a single case of peritonitis.—*Med. and Surg. Reporter*, Aug. 4, 1888.

Ether as an Intoxicant.—The following is the text of a somewhat remarkable petition to Parliament from the archbishops, bishops, clergy, and laity of the Church of Ireland in synod assembled:

That in certain districts in Ireland an unrestricted traffic exists in an article known as ether, which is a cheap and powerful intoxicant. Owing to its use as an intoxicant, many serious crimes have been committed, and great moral and material injuries have fallen upon the humbler classes of the population, and the beneficent effect of liberal laws, passed for the suppression of intemperance, has been to a great degree defeated, inasmuch as the traffic referred to is not subject to any legal regulation or supervision such as controls the sale of other similar dangerous drugs.

That your petitioners pray your Honorable House to make such enactments as shall to your wisdom seem sufficient for the regulation of a traffic which, as at present conducted, is prejudicial to the moral and material interests of a considerable class of Her Majesty's subjects.

Attention was first called to this method of inebriety by a communication to this journal by Mr. H. N. Draper, F. C. S., many years ago; and during the interval the system of ether intoxication has rather increased than diminished. We have seen a patient within the last few days who suffered from all the symptoms of alcoholic amblyopia and of gastric derangement usual in inebriates, but who asseverated that he was a teetotaller, and had never touched a drop of liquor for the last ten years. We are aware that there is abundant reasons for the manifesto of the bishops, and we trust it will be productive of good results.—*Med. Press*, May 9, 1888.

Westcott (W. W.) on Deaths from Alcoholic Excess in London.—Prompted by my friend Dr. Norman Kerr, I have made an analysis of 1220 consecutive inquests held by me in London, and I cannot refrain from making the results public. Of 1220 cases of death, including deaths from violence, sudden deaths, persons found dead, and deaths with regard to which no medical certificate is forthcoming, 470 were infants, children, and persons below the age of sixteen years. These may be presumably removed from the list of deaths from alcoholic excess. Of the remaining 750 deaths, no less than 143 are recorded as being the result of chronic alcoholic disease, acute alcoholism, delirium tremens, suicide caused by drink, or of accidental death while drunk, or of accidents arising because of incapability when intoxicated; that is, one death in every 5.24. Of these 143 cases, 86 were men and 57 women. Of these 143 cases, 21 were suicidal, 23 accidental, and 99 the result, more or less sudden, of syncope, apoplexy, etc., due to disease of the heart, liver, and kidneys, stated in sworn evidence as due to alcoholic excess. Of the 143 cases, 9 were suffocated during the stupor of alcohol, three died in the act of sexual intercourse from syncope due to degenerative cardiac muscular tissue, and 3 were run over by vehicles in the streets. Only 9 of the cases were of persons under thirty years of age, but 21 cases were of persons over sixty years old.—*Lancet*, July 21, 1888.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of

CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital; CONDICT W. CUTLER, M.D., Instructor in Diseases of the Skin, Post-Graduate Medical School, New York; JOHN D. HAWLEY, M.D., Attending Gynæcologist, New York Hospital, Out-Patient Department.

VOL. V., NO. 34. August 23, 1888. WHOLE NO. 82.

CONTENTS.

	PAGE
Leading Article	401
Diseases of the Eye and Ear	403
Occasional Report on Insanity	404
Miscellaneous	408

LEADING ARTICLE.

Perron on the Existence of Erectile Tissue in the Mucous Membrane of the Middle-Ear.—Erectile tissue has been demonstrated by histologists in the mucous membrane of the nose. In the normal state this cavernous tissue, without doubt, establishes a momentary congestion for the purpose of augmenting the functional sensibility of the mucous membrane, and at the same time its proper secretion. This increase in blood is brought about by direct excitation, or in a reflex way. Odors, the effort made to appreciate them produce it physiologically; a local irritation by a foreign body, as powders, gain the same result. This excitation, turgescence of the erectile tissue of the nose, can provoke varied reflexes in other organs, the action of certain muscles, the regurgitant contractions of the stomach, cerebral congestion, psychical phenomena, etc. Reciprocally, physiological and psychical phenomena can, in their turn, give rise by reflex, to a greater degree of turgescence of the erectile mucous membrane of the nose. Violent efforts, physical and mental fatigue, active emotions, mental tension, produce it easily, either mechanically, by augmentation of blood pressure, or indirectly by suspension of the action of the vaso-motor constrictors. The swelling which results can even be sufficient to induce vascular ruptures, and so nasal hemorrhages. Dr. Joal, of Mont-Dore, is calling attention to a peculiar kind of epistaxes, which he names genital, and which he attributes to swelling of the erectile tissue, and started in certain subjects by genesic excitations or coïtus. He cites, in support of his idea, some very interesting cases that prove how congestion of this tissue can be due to very singular causes. We have been struck by the analogy between these conditions in the pituitary membrane, the phenomena accompanying its turgescence, and the identical manner in which certain troubles in audition are produced. In a work published in 1887, on chronic middle-ear disease, we called attention to the peculiar influence the functions of organs quite distant from the ear have on this affection, such as those of digestion, and especially those of generation. We have an idea that functional disorders of these organs are determined through the medium of the great sympathetic, hyperæmias, congestions in the middle-ear capable of giving rise much later to the gravest lesions of hearing. Studies into the most frequent causes of chronic otitis media without discharge, lead us to admit that it is, above all others, due to special nervous troubles, and that it does not constitute an independent local affection. We have spoken of an erectile tissue in the nose as proven. The opening of the Eustachian canals are very near the posterior limit of the inferior turbinated bones, and their mucous membrane is nothing other than a continuation of the posterior nasal tissue. Careful study of the conditions that aggravate and prolong dry chronic otitis media permit the affirmation that the erectile tissue demonstrated in the pituitary membrane extends into the Eustachian canals and even in that part of the middle-ear chamber around the tympanic end of the canals. When one examines the causes of dry and atrophic oti-

tis, they are found to be exactly the same as produce turgescence and pathological modifications in the nasal erectile tissue. Hyperæmia, at first transitory, then permanent, swelling with dilatation of capillaries, hypertrophy, and atrophy ; all these take the same course in the two localities. The ease with which veinous congestion of the nose attacks the Eustachian canals, and eventually the middle-ear, proves that the mucous surfaces of these parts have an intimate circulatory connection. One does not need to seek for a special and local difference of the middle-ear surfaces from the nose to explain dry and atrophic otitis. In the great majority of cases the Eustachian canals and the middle-ear are exempt from catarrhal secretions, and the beginning of the attack shows only a slight hyperæmia of the mucous membrane. The swelling, hypertrophy, and adhesion process are due solely to congestion of an erectile tissue, a congestion whose causes are variable and that are more frequently without than in the ear. If the existence of this erectile tissue in the Eustachian canals and that part of the middle-ear next to the canal entrance is admitted, all the phenomena accompanying non-secretive otitis media are easily explained. From different influences, sometimes direct, as from cold, contact of instruments, sounds, but more frequently from action of a nervous nature, emanating especially from the alimentary system or the genito-urinary, the erectile tissue coating the Eustachian canals becomes turgescent. Immediately there results a narrowing of the calibre of these canals, and if the swelling partially attacks the middle-ear, the space of this is also lessened, the chain of ossicles curves backwards, the pressure is increased in the labyrinth, then deafness of varying degrees, and subjective noises. These effects are often produced so rapidly as not to be explained save from circulatory disturbance, a sudden hyperæmia set up by an erectile tissue. When middle-ear disease is aggravated during its course by this cause the canals will immediately become less permeable to the air douche. The classical experiment of Valsalva becomes, then, very difficult and even momentarily impossible of use. Auscultation of bruit with insufflation of air by means of the catheter gives, equally, proof of diminution of sonority in relation to swelling of the walls of the canals and middle-ear. Violent efforts, vivid emotions, fatigue, work of mind, digestive troubles, but especially genital troubles, finally all the troubles we have above recounted in relation to nasal erectile tissue, are capable of producing almost instantly turgescence of the mucous membrane of the middle-ear.

In certain patients a coïtus can bring on an acute congestion of the auditory apparatus, just as in others it results in epistaxis. All these aural hyperæmias dissipate just as the accompanying deafness, more or less slowly, but leave after them a greater and greater disposition to congestion. Later, when sclerosis is sufficiently well formed, it annihilates even the erectibility of the cavernous tissue, and causes a lesion functionally less varying and more stable. It is at this point that many cases of otitis become stationary because of the resistance offered by the sclerosed tissues to outside swelling. In our work on chronic otitis media mentioned above, we explained at length the uselessness and inconvenience of local treatment by gaseous douches, a medication capable alone of producing hypertrophy in a healthy tissue. Yet we believe that at the moment when the swelling of the mucous membrane submits to sclerotic transformation, air douches with pressure can then give some feeble amelioration entirely relative. In this case the gaseous douche, acting on a tissue growing more compact, secures but little distention, it is true, but more lasting than in a tissue only turgescent, and elastic enough to repress the simple swelling when the pressure has ceased to be exercised. It is easy to understand that on soft inflamed parts one cannot get a dilatation susceptible of maintaining itself. At the beginning of the affection gaseous douches are not followed by any favorable result, especially if there exists a dry hyperæmic otitis. Or rather, they can induce supplementary irritation, with turgescence following, and bring on grave inflammation that it would be possible to avoid by abstaining from this kind of treatment. How should one treat this tissue then so as to prevent abnormal hyperæmia? The most logical treatment would consist in modifying at the outset the condition of distant organs, of which we have spoken, whose functional troubles have so serious a reaction on the circulation of the ear. One should attack then the real causes that provoke turgescence of the pit-

uitary and middle-ear erectile tissue. Vaso-motor action exercised through involuntary fibres leads to the use of medical agents that are capable of exciting and strengthening actions governed by the great sympathetic. We at first employed ergotine, with this aim, which appeared to give feeble results. From other attempts with sulphate of atropine more clear results have been gained. Under the influence of progressive doses, from a half to three milligrammes, we have won very notable amelioration in two cases of pronounced atrophic otitis. It seems to us that atropine brings about energetically a depletion of the erectile tissue of the nose and middle-ear. Sometimes a quarter of an hour after its ingestion there can be noticed a diminution of the subjective sounds, and an increase of audition. Politzerization shows at this time a greater freedom in the Eustachian canals. Atropine can be employed for quite a while without inconvenience if its effects are carefully watched. The results that this substance has already given us are satisfactory. It is propable that through its stimulation of the vaso-motor constrictors, atropine will secure more complete success in the period of simple hyperæmic otitis than that we have gained in cases of atrophy already of long standing. We have essayed to prove from analysis of causes and symptoms the existence of an erectile tissue in a portion of the mucous membrane of the middle-ear. In the normal condition this erectile tissue seems to us to have the duty of determining a hyperæmia of the aural mucous membrane, capable of giving a tension, a rigidity to the walls of the Eustachian canals and cavity of the tympanum when the auditory function physiologically requires it. It may be that this erection is not accompanied by any noticeable swelling, but rather by a certain extension of the parts, augmenting in a favorable way the perception of sound. When from some repeated causes this turgescence becomes habitual, there results a condition which gives rise to that affection of the ear so frequent, so rebellious, chronic non-catarrhal otitis media. We have in the course of this paper employed the terms dry otitis, atrophic, hypertrophic, indifferently. For the various epithelial modifications that can arise upon the mucous membrane of the middle-ear are secondary, and should not be divided into absolute divisions, for the cause engendering these forms of otitis is always the same. Abnormal hyperæmia of this erectile tissue can produce different degrees of alteration constituting either the dry form, or the atrophic, or the hypertrophic. Their manifestations may differ, but their cause is one.—*Gaz. Hebdom. des Scien. med. de Bordeaux*, May 27, 1888.

A. T. M.

DISEASES OF THE EYE AND EAR.

ABSTRACT BY A. T MUZZY, M.D.

Williams (A. D.). Lead Deposits on the Cornea, Treatment.—Formerly sugar of lead was about the only remedy used for sore eyes. As a result it happened that when ulceration of the cornea took place there was a deposit of the lead. The fear of this deposit now deprives many of the use of a good and harmless remedy, save where the epithelium of the cornea is eroded. When the lead is once deposited it is the source of constant irritation, preventing complete healing. The lead prevents the re-formation of the epithelium, thus leaving the nerve-terminals exposed to the air. The treatment consists simply in scraping off the deposits completely, allowing the epithelium to form and protect the nerve-terminals. Cocaine is much better than the old use of chloroform. The edge of an ordinary knife can be used held vertically to the cornea and scraped back and forth. A solution of atropine is required afterwards to heal the ulcer. The result is gratifying.—*St. Louis Med. and Surg. Jour.*, July, 1888.

Brook (W. H. B.). Case of Tarso-Cheiloplastic Operation for Trichiasis.—The operation consisted in an incision along the margin of the lower lid just internal to the ciliæ 15 *mm.* long and 4 *mm.* deep. The skin and lashes were drawn downwards on the cheek by four sutures silk, one end of them being through a fold of skin as near as possible to the lashes, and the other end through a fold 8 *mm.* down on the cheek. Then from the conjunctiva of the lower lid was cut a piece which a little more than filled the gap opened by the sutures. This graft was fitted into its place without sutures, but simply dusted with iodoform held by a pad of cotton moistened by hot perchloride solution of mercury (1 in 2,000) and a

bandage. Two days after, when these bandages were removed, the graft was well united. Four weeks after the operation the ciliæ are in a normal position and with no tendency to incurve. An opacity of the cornea induced by the trichiasis is disappearing and vision improving. The subject is an anæmic girl of eighteen.—*Lancet*, June 23, 1888.

Galezowski on the Curability of Detachment of the Retina.—Myopia is the most frequent predisposing cause of detachment of the retina. It is rarely seen as a product of constitutional affections. But while myopia is the predisposing cause so frequently, it is not so frequently the exciting cause. Traumatism without doubt is most frequently the direct producer of this accident. Still, though Leber makes the assertion that all detachments of the retina are accompanied, and even preceded by, tearing of the retina such as to be detected by the ophthalmoscope, I have seen it in only about fifty per cent. of my cases; 301 out of 649 cases previous to 1883. The degree of myopia does not seem to matter. Neither does the intensity of the violence determine the amount of injury to the retina. Graefe thinks that the detached retina never reassumes its functions. And he is supported in this by certain other authors. But from my experience it seems capable of reattaching itself and recovering its functions.

In five cases noted at length the following conclusions were fairly deduced: 1st, detachment of the retina is not an incurable disease; 2d, that the detached visual membrane can recover its functions at least to a certain extent; 3d, operations of aspiration of the fluid without suture induce amelioration; 4th, aspiration with use of suture can be used only in a limited number of cases. It is yet to be learned what is the principle that renders recovery so difficult and by what method, the most rational and efficacious, it can be attained. —*Recueil d'Ophth.*, Paris, March, 1888.

Bennett (F. W.). Sympathetic Affections of the Ears.—In two instances a sympathetic relation seems to have existed between the affected ear and its fellow. The first was a man of twenty-five years deaf for several months. Hearing-distance was about six inches on either side. After incising the left membrane and syringing out considerable mucous, although the same condition existed in both ears, the hearing was improved to two feet on the side not operated on, as well as that operated upon. The improvement was, however, temporary on the right side until it also was incised. The second case was an anæmic painter with recent deafness and pain on the left side, with constant humming on the right. After removing a recent collection of cerumen on the left side not only the pain and deafness disappeared, but also the tinitus of the opposite side.—*Lancet*, July 30, 1887.

Williams (A.D.). Campho-Phenique in Aspergillus.—Another case of the prompt success of this remedy for aspergillus is offered. A lady's ear suddenly beginning to itch and burn, with sense of fulness and heaviness present. The external meatus was seen to be full of the peculiar lard-like secretion. After removal of this substance the membranes of the ear were found greatly congested, and inclined to bleed. One thorough swabbing with campho-phenique was sufficient to destroy the fungus.—*St. Louis Med. Surg. Jour.*, July, 1888.

OCCASIONAL REPORT ON INSANITY.

BY FREDERICK PETERSON, M.D.

Savage (George H.) on Syphilis in its Relation to Insanity.—In the discussion on this subject before the Section of Psychological Medicine of the Ninth International Congress, the superintendent of "Bedlam" expressed views which may be briefly summarized as follows: Few cases of congenital weak-mindedness depend upon syphilis. Not more than two per cent. of idiots show signs of it. Cases of insanity caused by acute syphilis are very rare. Syphilis produces epilepsy frequently, and if there be subsequent mental degeneration it is often unusually rapid. General paralysis he would not call a syphilitic disease, though a certain, rather large proportion of cases have a true specific origin. Twenty-five per cent. of general paralytics admitted to Bethlem have a syphilitic history. He knows of no means of distinguishing specific cases from those otherwise originated. General paralysis following syphilis may start either in the brain; or in the spinal cord as a locomotor ataxia.

The worry and anxiety occasioned by

having the disease or giving it to one's family have often produced melancholia and hypochondriasis. The general anæmia and cachexia produced by syphilitic ulcers may give rise to melancholia, owing to bad state of nervous nutrition.—*Am. Journal of Insanity*, Jan., 1888.

Lloyd (T. M.) on the Use of Hypnotics Among the Insane.—The author sent the following questions to several superintendents of insane asylums:

First.—What remedy do you regard the purest hypnotic,—viz., that which acts especially upon the higher nerve-centres, producing sleep, and is most free from special and incidental effects upon other organs, the circulation, general secretions, etc.?

Second.—Please enumerate the hypnotics most depended upon in your institution in the order of their relative use.

Third.—To what extent have the newer hypnotics—urethan, paraldelhyde, hyoscine, etc.—supplanted the older ones?

Fourth.—What is your experience with chloroform and ether, or other anæsthetic, in controlling the extreme excitement of acute mania or the frenzy of acute melancholia?

Fifth.—Please indicate your practice as to dosage.

He received answers from Drs. J. B. Andrews, of the Buffalo State Asylum, John W. Ward, of the Trenton State Asylum, H. F. Carriel, of the Illinois Central Hospital for the Insane, and E. N. Brush, of the Pennsylvania Hospital for the Insane. In answer to the first of these questions all of these gentlemen said chloral hydrate. Dr. Andrews' response to the second was chloral, bromide, morphia, and Merck's impure hyoscyamine. Dr. Ward's chloral, paraldehyde, bromides (chiefly potassium), hyoscine hydrobromate, and hyoscyamine. Dr. Carriel's, chloral, hyoscyamine, opium, bromides, urethan, fluid extract of hyoscyamus. Dr. Brush's, chloral, hyoscine hydrobromate, sodium bromide, tincture of hyoscyamus. None of these physicians speaks in glowing terms of urethan, or paraldehyde. In answer to question No. 4 Dr. Andrews states that he has had no experience; Dr. Ward, that he had tried ether successfully in a few cases of acute mania where quiet was obtained as long as the anæsthetic was administered; Dr. Carriel, that he had tried chloroform in acute mania without lasting effects; Dr. Brush, that he had never used either anæsthetic and had only known of harm attending their administration by others in such cases. Ten to twenty grains of chloral, 30 to 60 minims of paraldehyde, 10 minims of fluid extract of hyoscyamus, 20 to 30 grains of the bromides, $\frac{1}{150}$ to $\frac{1}{60}$ of a grain of hyoscine seemed to be the prevailing ideas of dosage.—*Therapeutic Gazette*, Feb. 15, 1888.

Shuttleworth (G. E.) on Idiocy and Imbecility Due to Inherited Syphilis.—Referring to the statement of Dr. Langdon Down, that not more than two per cent. of his cases were due to syphilis, and to the facts that Mr. Jonathan Hutchinson with his vast experience considers idiocy and congenital syphilis to be rarely associated, that Dr. Fletcher Beach, also with large experience, does not even refer to syphilis in an article on the influence of hereditary predisposition in the production of imbecility, and that the statistics of several large institutions seem to be corroborative of their views, the author disputes the value of the statistics upon which these opinions are based. He believes inherited syphilis plays a larger part in the production of mental enfeeblement than is generally supposed. In applying for admission of a child to an asylum, parents are not likely to avow syphilis, but rather to elude questions upon that subject. Then as mental impairment is seldom distinct until the period of second dentition and often accompanied by paralysis and other degenerative symptoms, these cases are rarely received in institutions intended for the education of imbeciles. Furthermore, many cases are classified as due to hydrocephalus, eclampsia, or epilepsy, which are themselves of specific origin.—Part of discussion at the Ninth International Congress, *Am. Journal of Insanity*, Jan., 1888.

Macdonald (C. F.) on Recoveries from Insanity in Cases Accompanied by Hæmatoma Auris.—The author collects four cases of insanity which recovered, although hæmatoma auris had developed during their course, which is a nullification of the generally-received dictum that a hæmatoma points conclusively to incurability. The first was described by Dr. William Teats in the *British Medical Journal*, 1873, the second by Dr. Needham, of the Bootham Asylum, York, the third by Dr. E. H. Van Deusen, in the

Am. Journal of Insanity, July, 1874, and the fourth occurred in the practice of the writer at the Auburn Asylum.—*Jour. of Ner. and Men. Dis.*, Feb., 1888.

Buchanan (J. M.) on Insanity in the Colored Race.—In 1860 the ratio of the insane among the colored people was one in every 5,799, and in 1880 one in 1,096. The doctor quotes Bucknill and Tuke to the effect that the maximum ratio of insanity coincides with the maximum point of civilization, and intimates that possibly the ratio among the blacks may never equal that among the whites, one to 500. According to the census of 1880 there were 6,165 colored people insane in the United States.—*N. Y. Medical Journal*, July, 1887.

Bristowe (J. S.) on the Differential Diagnosis of General Paralysis, Tabes Dorsalis, and Disseminated Sclerosis.—Although typical cases of these diseases present strikingly distinctive features, and cannot well be confounded with one another, there are many cases that are not typical in regard to which a differential diagnosis is, for a time at any rate, difficult, if not impossible. There are certainly two well-marked varieties of general paralysis, one where the symtoms are associated with those of tabes, the other where the symptoms are associated with those of disseminated sclerosis. When either of these diseases complicates general paralysis, however, the latter is always the predominant disease. The real difficulty in making a correct diagnosis is in the earlier periods of these disorders.

The usual symptoms of tabes dorsalis, or progressive locomotor ataxia, are as follows: Impaired co-ordination of the muscular movements of the lower extremities, abolition of knee-jerks, numbness of feet and legs, peculiar neuralgic pains in them, sometimes similar affections of hands and arms, liability to pains in stomach, rectum, and other viscera, known as "crises." The sense organs are often affected; sometimes there is temporary or permanent paralysis of the motor muscles of the eyes, frequently the pupils are contracted, and usually insensible to light, but act to accommodation; occasionally blindness or deafness ensues, or the speech acquires the scanning character more common in disseminated sclerosis. Then the symptoms come on gradually, and not necessarily in any definite order; so that sometimes lightning pains, lost knee-jerks, or some affection of the eyes, such as squint, precedes by a long interval the development of muscular inco-ordination. Further ataxics are sometimes liable to epileptiform attacks, and to mental derangements wholly independent of the presence of general paralysis, and such symptoms may either precede true tabetic symptoms or arise in their course.

The symptoms of disseminated sclerosis vary largely in different cases. Still there is a large group presenting a striking uniformity of character, with symptoms as follows: Rhythmical tremors of the head and arms when unsupported or in use; spastic paralysis, without sensory disturbance, of the legs; nystagmus, scanning utterance, and tendency to depression of spirits, and some degree of mental failure. But we are also apt to meet in different cases with paralysis of the external ocular muscles, impairment or loss of sight from atrophy of the optic discs; and, sooner or later, epileptiform seizures, in which rising temperature usually heralds the onset of each attack. In this case, as in tabes, the development of the typical form of the disease is often preceded at long intervals by some one of its symptoms, such as, for example, temporary or permanent squint, exaggerated knee-jerk in one or both legs, tremors in one or both hands, or by slight impediment of speech. In this affection, too, even more than in tabes, mental derangement, chiefly dementia perhaps, is liable to come on early or develop late. Some degree of emotional or intellectual disturbance is one of the common symptoms of disseminated sclerosis, and the supervention of epileptiform attacks is to be anticipated.

Fully-developed general paresis is a disease that can scarcely be misinterpreted. The patient is irritable and variable in temper. He has delusions, usually grandiose in character, such as that he is emperor of the world, God Almighty, that he is immensely rich, infinitely powerful, or that his mental and bodily qualities are unsurpassable, and so on. But with these delusions he mixes up everyday affairs in a curiously incongruous manner, so that while he tells us he is rich as Crœsus, he begs money perhaps for tobacco. In fact, his mental condition is one of delusion of grandeur associated with failure of memory and power of reasoning. The paralytic

symptoms are, for the most part, general. His limbs are weak and tremulous, his gait uncertain and tottering. The changes in speech are pronounced and striking; in earlier periods there is mere trembling of the lips, especially noticeable at the beginning of sentences or words; later, all the muscles concerned in moving the lips are involved, and still later even those of the eyelids, eyebrows, and forehead join in the spasms which now not only precede but accompany the acts of articulation. At first the speech may be merely hesitating, but gradually the utterance becomes more hesitating and imperfect; sometimes he stammers, not infrequently speaks as if sobbing, and sometimes the tremulousness and uncertainty of articulation become so extreme that it is impossible to understand him. The pupils are generally unequal, the skin greasy, the knee-jerks exaggerated or abolished. At various periods there are epileptic fits, ushered in by rising temperature, as are those of disseminated sclerosis. Sometimes the paralytic phenomena precede the mental, or vice versa; occasionally they arise simultaneously; not infrequently the first indication of illness may be an epileptic fit. Not infrequently the grandiose delirium is replaced by melancholia. Although commonly thought to be fatal within two or three years of its onset, recent investigation has shown that the confirmed symptoms of general paralysis are often preceded by years of progressive slight deterioration of character and of growing irritability and weakness of mind.

The author then proceeds to relate in detail a number of cases illustrating the difficulties of differential diagnosis between these three diseases when the symptoms are atypical. In Cases 1 and 2 the first symptoms of general paralysis were isolated epileptic fits, which preceded by long intervals any mental change. Case 3 had most of the paralytic phenomena of general paresis, but no symptoms of marked mental change except low spirits and a very slight degree of forgetfulness of words. As the disease progressed he was sent to an asylum, but even there never manifested delusions; he was quarrelsome, untrustworthy, and feeble-minded.

Case 4 presented fairly characteristic symptoms of general paralysis, but associated with symptoms of both tabes and sclerosis. There was no grandiose delirium, no delusion. He was irritable and quarrelsome and forgetful. The paralytic phenomena presented curious changes; there was an opthalmoplegia interna which varied from time to time. The knee-jerks were at first exaggerated, but in the course of time diminished in one leg and disappeared in the other. He had lightning pains in his legs for a few weeks. He had Argyll-Robertson pupils, and they were also unequal.

Case 5 without warning, when in good health, had an epileptic fit. For several years previous he had had shooting pains in his legs. A year later he had a succession of similar fits, was unconscious for a fortnight, and afterward his memory was much impaired. He soon became well again and went on with his clerical duties. A year later he had another fit. Became depressed in spirits. He had lost sexual desire and aptitude. His expression was dull and sad, face greasy, pupils unequal, knee-jerks lost. He could walk without difficulty, stand with eyes shut, had no defect of speech or writing, but lips trembled very slightly previous to utterance. No mental derangement. No new symptoms during the six months following. Case suspected to be one of general paralysis.

The author then proceeds to relate cases of locomoter ataxia with peculiar mental characteristics. One was hysterical, another a hypochodriacal melancholiac, and still another had remarkable attacks when every one seemed to him to become two or three times as tall as natural.—*British Med. Jour*, Jan., 1887.

Granger (William D.) on the Care of the Insane of New York State.—The author points out the increase of the number of insane in the State. In 1870 there were 5,623 insane in public institutions; in 1880 there were 9,537, and in 1886 this number had increased to 13,538. At the same rate of increase there should be 16,202 in 1890 and 22,862 in 1900. There is an average of one insane person to every 406 people in the State. He sums up the causes of the increase as follows: 1. The immigration of insane foreigners, or those who possess the essential elements to produce the disease. 2. The prolonged life of the chronic insane. 3. Improper and delayed treatment in county asylums or at home, during the curable stage. 4. The multiplication of asylums and their ease of access. The author de-

cries the present system of having but one Commissioner in Lunacy to look after so many insane, and advises increasing the number to five, two of whom should be medical men, and one a lawyer.—*N. Y. Medical Record*, Oct., 1887.

Séglas (J.) on Paranoia.—The author gives an historical and critical review of the subject as it has been studied by the Germans, Italians, French, and some others. He concludes that paranoia is no new thing in psychiatry. Born in France, the doctrine of primary systematized delusions has been especially developed in Germany, and since then in other countries, particularly Italy. The study has perhaps been pushed to exaggeration, each one wishing to add something of his own, thus bringing confusion by multiplication of forms. All authors admit a form of primary paranoia engrafted on a soil of degeneration, and the existence of which is moreover indisputable; but some only admit this one form with subdivisions, and others restrict its domain and do not consider that the ground of mental deterioration is indispensable to the production of paranoia.

Opinions are much divided as to the form of paranoia known as acute, psychoneurotic, hallaucinatory and curable, admitted for the first time by Westphal. Some follow the ideas of the latter, like Meynert, Fristh, Mendel, Tiling, Amadei, and Tonnini. Others completely deny its existence or at least do not describe it as a form of paranoia, like Krafft-Ebing, Pelman, Mayser, Morselli, Tanzi, and Riva. The author shares the convictions of the latter. He fails to find a single pathognomonic symptom which could show in any way relationship between this acute paranoia and the chronic form, whether degenerative or primary. He thinks this variety rather comparable to certain melancholic states sometimes, and at times to states of simple or symptomatic maniacal excitement.

The existence of a secondary form of paranoia is indisputable. It is simply one form of systematized delusion secondary to some maniacal or melancholic state of which it serves as the termination or as a stage on the way to dementia.

As regards the pretended forms of paranoia known as hysterical, epileptic, and alcoholic, the author wishes with Krafft-Ebing to place them in the pathological class of which they form a part, although possibly some of these patients may be true examples of paranoia.—*Jour. Nerv. and Ment. Dis.*, March, April, May, and June, 1888, translated by William Noyes, M.D., from the *Archives de Neurologie*, 1887.

MISCELLANEOUS.

Heart Lesions in Kidney Affections.—In the Middleton Goldsmith lecture delivered last April before the New York Pathological Society, Dr. J. M. DaCosta discusses the above subject, concluding that apart from induration, organic heart disease does not cause any kidney disease. The hypertrophy of the heart so often found especially in connection with the cirrhotic kidney is not regarded by him as a result of the kidney lesion. He again brings before the profession certain changes found by Dr. Longstreth and himself in the ganglionic nervous system, and advances the theory that these lesions of the sympathetic are causative, both of the cardiac hypertrophy and the kidney and vascular lesions; but he does not pretend to explain the connection between the two.

Lesions of the sympathetic ganglia were found by Dr. Hale White associated with a number of pathological conditions, so that Dr. DaCosta's theory seems already extremely improbable even in the very dim light of our positive knowledge of the subject. Hitherto cardiac hypertrophy has been regarded as evidence that the heart has been overworked. The various theories which have been enunciated have been, for the most part, attempts to explain how deficient secretion of the urine could give rise to difficulties in the peripheral circulation and so to cardiac hypertrophy. Dr. DaCosta states that in cystic degeneration of the kidneys, a disease in which the destruction of the secreting substance of the organ may be quite as complete as in any form of Bright's disease—cardiac hypertrophy is not in his experience found. From this he argues that there is no connection between the defective action of the kidneys and the cardiac hypertrophy, but that both are the results of a common cause, which he thinks may be the abovementioned lesion of the sympathetic ganglia. According to the views of Gull and Sutton both cardiac hypertrophy and kidney lesion in many cases are due to arterio-capillary fibrosis. Dr. Arthur O. Meigs (*Medical Record*, July 7, 1888) reports the

finding of very extensive atheromatous changes in the arteries and veins in two cases which he regards as etiologically connected with the disease. In the *American Journal of Medical Sciences* (June, 1888), he publishes a case in which there co-existed extensive atheromatous changes of the arteries and veins, lesions of the aortic valves, fibroid degeneration of the heart muscle, and Bright's disease predominantly parenchymatous in character, the latter being clinically latent. He asks why may not the vascular changes be the lesion underlying all the others? That this question is to be answered affirmatively with regard to the fibroid heart is certain (see MEDICAL ANALECTIC, Feb. 9, 1888).

That the aortic valvular disease may be regarded as part of the general affection of the vessels accords with received pathological views. But that the parenchymatous nephritis is also a result of vascular atheroma seems rather doubtful. It is the interstitial form of nephritis that Gull and Sutton claim to connect with vascular changes. But to the writer it has always seemed unsatisfactory to ascribe the changes in small contracted kidneys *solely* to vascular lesions which those organs share with all the rest of the body, inasmuch as the other organs as a rule preserve a very fair condition of nutrition in spite of the vascular changes. It seems much more plausible in many cases to suppose that both the kidney and vascular lesions are the result of a common cause, and that the cardiac hypertrophy is due not directly to the disease of the kidney but to the simultaneous affection of the vessels. Dr. Mahomet's "pre-albuminuric stage of Bright's disease," according to this view, would be a condition of affairs in which the common cause had appreciably affected the vessels but had not yet sufficiently damaged the kidneys to render the lesion manifest. In the case of acute nephritis we know that the disease most often occurs as the result of some specific poison, which manifests itself in other organs also, as in the case of scarlet fever, etc. The same state of affairs is to some extent recognizable in chronic kidney disease. Gout, lead poisoning, malaria are agents which are recognized as causing chronic nephritis. As our knowledge increases, a diagnosis of chronic Bright's disease of this or that anatomical form ceases to be sufficient. It is obviously necessary to study the lesions of other organs and the history of the cases to determine the questions of prognosis and questions of etiology as well as therapeutical indications. Most prominent among these organs are the heart and blood-vessels.

In his lecture Dr. DaCosta states that cardiac hypertrophy does not exist in acute Bright's disease. Bamberger[1] however found it in fifteen out of sixty-seven cases. Silberman[2] and others have observed it in scarletinal nephritis. Bamberger also states, contrary to DaCosta's experience, that hypertrophy of the heart has been observed in cystic degeneration of the kidneys. These facts certainly seem to indicate that a direct communication does in many cases exist between the kiddey lesion and the cardiac enlargement. The explanation which Bamberger regards as most satisfactory is Traube's, which DaCosta does not mention, viz., that owing to the diminished excretion of water by the kidneys the blood mass is abnormally great and therefore the work of the heart is increased. He regards this explanation as good, even for the cases in which urine is excreted in abnormal amount, the abnormal excretion being only during the terminal stages of a disease, the earlier source of which we know nothing about. As it is in these very cases, *i. e.*, cases of cirrhotic kidney, that the vascular changes above mentioned, it would seem most plausible to the writer to associate the two as above suggested, reserving the abnormally great blood-mass theory for the acute cases. Whatever may be the explanation, the fact of high arterial tension in acute Bright's is beyond dispute. In a case recently seen in consultation by the writer, of acute Bright's disease following a complicating facial erysipelas, death took place from obvious heart failure. No evidence of either hypertrophy or dilatation could be discovered and there were other reasons for cardiac debility than the high tension shown by the pulse. There can be no doubt, however, that this latter was an important factor in the case.

Potain, in the *Semaine Médicale*, has added several cases to others previously reported by other writers of cardiac hypertrophy

[1] Ueber Morbus Brightii und seine Bezierungen zu anderen Krankheiten, Volkmann's "Klin. Vorträge," No. 173.

[2] "Jahrbuch für Kinderheilk., Bd. xvii., p. 178.

following painful lesions of the brachial plexus. These cases recall the fact that Bright regarded as a possible source of cardiac hypertrophy, in the disease bearing his name, a direct excitation of the heart by the impure blood, and suggest that there may be after all something more than purely mechanical factors in the etiology of cardiac hypertrophy in Bright's disease. A recognition of the very complex relationship of the disease and a *careful study of individual cases* seems to the writer as the only method of finally solving the problem. Statistical statements are worth something, but careful study of the details of individual cases is necessary to explain apparent exceptions to rules, and to give really profound insight into pathological processes.—R. VAN SANTVOORD, M.D.

Edwards' Sphygmograph. — Some time ago Dr. H. R. Hopkins, of Buffalo, published an article [1] on the workings of the above-mentioned instrument, which we have desired to comment upon. He states that the instrument is "in every way free as possible from inertia, friction, and other sources of instrumental error," but he does not explain its mechanism. On comparing the tracings given by Dr. Hopkins with those taken by the Marey instrument in analogous cases a striking difference is noticed. This consists of a very marked exaggeration of the elevations and depressions of the former as compared to the latter.

Almost all the peaks and depressions of Dr. Hopkins' sphygmograms are of a uniform shape. These two facts seem to pretty strongly indicate that inertia is very imperfectly checked, and that the tracings, for the most part, represent the oscillations of a spring, or some equivalent mechanism, set in motion by the primary stroke of the pulse, more or less modified by the succeeding changes in the tension of the vessel, instead of, as in the Marey instrument, of a transcript of the variations of the arterial tension, more or less modified by the vibrations of a spring. Sphygmograms are at the best difficult of interpretation, and their transcription with the most perfect instruments requires care and experience to avoid gross error. Unless the Edwards instrument can be so modified as to obviate what seems to us a very obvious defect, its advent is to be regretted as serving only to add one more element of difficulty to the study of the pulse.

It must be confessed that Dr. Hopkins' article is more successful in proving his own enthusiasm than in demonstrating the great utility of the sphygmograph. The writer, however, shares his enthusiasm, and is inclined to think that a more careful study of its revelations is destined to shed light on many obscure problems. The instrument used by him is the Dudgeon's sphygmograph, improved by placing two small turniquets on the band which attaches it to the wrist. By turning these simultaneously, the band may be tightened or loosened, without displacing the instrument. Now and again in the journals this instrument is spoken of as having been found unreliable. The writer's sphygmograph has, however, given tracings which are very satisfactory reproductions of those given by Marey in analogous cases, due allowance being made for the facts that the marker in the former works at right angle, to the axis of the paper in a straight lines the latter in the arc of a circle. Anybody who has experienced the difficulty of adjusting the instrument with the buckle and strap ordinarily provided with it, will recognize at once that the use of the turniquets, as above-mentioned, adds very greatly to the ease and certainty of its application. R. VAN SANTVOORD, M.D.

Ricin, a Toxic Ferment Contained in Castor-Oil Seeds.—It has long been known that the seeds of the castor-oil plant were poisonous, but the nature and properties of the toxic principle were very imperfectly known. A good deal of light has now been thrown on the question by the publication of a Dorpat graduation thesis by Dr. H. Stillmark, who has been working at the subject in Professor Kobert's laboratory. He finds that the only toxic principle contained in ricinus seeds is an albuminoid body, which he names "ricin," and classes amongst the so-called "unformed ferments." It is unaffected by dry heat of 100° C., but is destroyed by boiling. It acts, when administered by the mouth or by hypodermic or intravenous injection, by producing hemorrhagic inflammation of the gastro-intestinal tract, especially and primarily affecting the small intestine, and secondarily the stomach and large intestine. It usually also causes ex-

[1] Undated reprint from *The Medical Press of Western New York.*

treme fulness of the gall-bladder, probably by setting up some obstruction of the bile-duct; frequently also the bladder is found greatly distended with urine, the vesical mucous membrane being inflamed. In connection with these experimental results obtained by observations on animals, it is interesting to note that jaundice and anuria have been observed in some cases of accidental poisoning by castor-oil seeds in the human subject. Diarrhœa is by no means constant, constipation having been frequently noticed both in experimental and clinical cases. Dr. Stillmark has never observed the cholera stools in animals which have been described as occurring in cases of accidental poisoning. The drowsiness and convulsions which occurred in some of his experimental observations he is disposed to attribute to thrombosis of the cerebral vessels. As to the lethal dose, he finds that for animals it is 0.1 milligramme per kilogramme of body weight when the drug is injected into the veins, so that for a man weighing 60 kilogrammes it would be 6-0 milligrammes. As drugs administered in this way are perhaps ten times as active as when taken into the stomach, the ordinary lethal dose of ricin may probably be set down as about 60 milligrammes, a quantity contained in ten ordinary seeds. It must be observed, however, that Christison once had a fatal case where only "two or three" seeds had been swallowed. This seems to have been a very exceptional instance, as there are many cases on record where a much larger quantity has been taken without a fatal issne: *e. g.*, Rapp reported a case where an Italian non-commissioned officer took seventeen ricinus seeds, and recovered; Bouchardat, on the other hand, had one where a girl of eighteen ate twenty seeds, and died in five days. Experiments on the physiological action of ricin showed that it possesses a peculiar effect upon blood. When this is defibrinated, ricin produces a conglomeration of the red corpuscles, together with the formation of a fibrin-like substance. When blood is freshly drawn from a vein ricin causes it rapidly to coagulate. Again, defibrinated blood is rendered capable of passing through a filter by ricin—that is to say, the serum passes through, leaving the red corpuscles behind; an extremely dilute solution is sufficient for this—of ricin 60,000. No effect was produced by ricin on isolated nerves or on the blood pressure, and little or none on isolated muscles or on a frog's heart prepared according to Williams' method. Other euphorbiaceæ were examined, especially the croton-oil plant, and an identical, or at all events a similar, poisonous principle was found in them. It was plainly proved by Dr. Stillmark's experiments that the action of castor-oil has nothing at all to do with ricin; also that croton-oil acid, which has been shown by Buchheim, Krich, Hirschheydt, and Kobert to exist in croton-oil seeds, is an entirely distinct body from ricin. These seeds therefore contain two virulent but distinct poisonous principles—ricin and croton-oil acid.—*Lancet*, July 21, 1888.

Toxic Effects of Lathyrus Sativus.—The plant called sometimes the "white vetch," the scientific name of which is lathyrus sativus, has long been known to be capable of producing serious toxic symptoms both in the human subject and cattle when used for a prolonged period as food. This condition, which is termed "lathyrismus," has recently been studied by Dr. B. Suchard, who has collected a large number of cases which have been published from time to time, some of them as early as the seventeenth century. In the human subject the chief effects produced are on the muscles of the lower extremities, especially on those below the knee. Horses which have been fed on the plant for a considerable period drop while performing the lightest work in consequence of paralysis of the hinder extremities, and in many cases death has followed from bilateral paralysis of the laryngeal recurrent nerves and consequent asphyxia. This laryngeal affection does not occur in the human subject, and death very rarely takes place. Cantani, of Naples, has reported a number of cases in which he examined the muscles very carefully, and noted that the adductors were far less affected than the abductors. The muscles of the face, neck, trunk, and upper extremities were not affected at all, only those of the lower extremities. The cutaneous sensibility was not affected even in the legs, and there was no retardation of the perception of an irritant; the reflexes also were good. The descending galvanic current produced slight contractions, but only when the circuit was closed. These contractions were weaker on the right side than on the left, and weaker also in the flexors than in the extensors.

With the ascending current no contractions were obtained either on closing or on opening the circuit. A fragment of muscle excised and examined microscopically showed a diminution in the transverse marking, and several minute fat globules were visible. In other cases incontinence of urine has been frequently noted, and in some reported by Giorgieri the tendon reflexes were increased. Proust believes that there is first produced a transverse myelitis, or a hemorrhage of the spinal cord, leading to secondary degeneration of the posterior columns. If so, this must be transitory, as patients generally get well, or, at all events, better, in time, and where post-mortem examinations have been obtained no indications of the spinal cord affection have been found. A. Strümpell believes that the lateral columns must be affected, the general symptoms corresponding very closely with those of the so-called spastic spinal paralysis. Several attempts have been made by Teilleux, Bourlier, and Astier to isolate the toxic principle. The last-named observer obtained from the seeds by Stats' method an alkaline volatile liquid body, which produced all the effects of the alkaloid itself. According to him, this, being volatile, is not present in preparation, such as pressed cakes made at high temperature, and these are found not to be poisonous. If, however, such cakes are prepared at low temperature they exhibit toxic properties, a circumstance which is explained by their retention of the toxic principle, which, being volatile, is driven off when a high temperature is used.—*Lancet*, June 30, 1888.

Broughton (L. G.) on a Case of Cocaine Poisoning.—A dentist placed in a tooth cavity a small piece of cotton containing three drops of a 20-per-cent. solution of muriate of cocaine. Upon the patient's arrival home she said to the family that she felt tired and must go to bed. When I arrived, which was in a few moments after she had taken her bed, I found her entirely unconscious, breathing very irregularly, and only 12 to the minute, her pulse 47 to the minute, pupil on the right side (side on which the cocaine was used) was very much dilated, tongue drawn to the left side, and the whole system in an extreme state of relaxation. She responded not at all to a pin which was stuck in her right arm, and all efforts to arouse her to sensibility were in vain.

The free administration of brandy by the mouth and $\frac{1}{100}$ grain of strychnia hypodermically was followed by complete recovery in two hours.—*North Carolina Med. Jour.*, July, 1888.

Coe (H. C.) on Albuminuria in Diabetes Mellitus.—According to the author albuminuria occurring in diabetes has the same import as in ordinary cases. A trace of albumen, appearing transiently or intermittently (when proved by exclusion to be of renal origin), and seldom or never associated with casts, may be regarded as due to irritation of the kidneys from the glycosuria. The immediate prognosis is good; but renal changes may subsequently result.

The occurrence of persistent albuminuria and numerous casts in a case of diabetes of long standing is of grave import, as pointing to the existence of chronic nephritis; if acetone and diacetic acid are also present, the patient may die in coma at any time.

Examination of the urine furnishes complete evidence of the patient's danger, even when the general condition is not such as to excite apprehension.—*N. Y. Med. Jour.*, July 28, 1888.

Sugden (E. S.) on Symptoms of Poisoning by Æthusa Cynapium (Fool's Parsley).—Joseph P——, aged nineteen, applied at the Birkenhead Borough Hospital at 8.30 A.M. on June 29th. He stated that on the previous evening he gathered by the hedge-side several leaves of an herb he thought to be tansy. Before going to bed he ate a few of these leaves, and about three o'clock in the morning he began to vomit; this vomiting continued for three or four hours off and on till he came to the hospital. When I saw him at 8.30 A.M. he complained of nausea and headache, with a burning sensation about the mouth and throat. The pupils were widely dilated, and the pulse very quick and feeble. The patient was put to bed, and no treatment ordered beyond a five-grain calomel powder and an ounce of castor-oil. By the next morning he was quite well. The lad brought with him a piece of the herb, which was undoubtedly fool's parsley, and the case is interesting in view of the experiments made some years ago by Dr. John Harley (St. Thomas' Hospital), which were supposed to prove that the herb was completely harmless.—*Lancet*, July 7, 1888.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of

CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital; CONDICT W. CUTLER, M.D., Instructor in Diseases of the Skin, Post-Graduate Medical School, New York; JOHN D. HAWLEY, M.D., Attending Gynæcologist, New York Hospital, Out-Patient Department.

VOL. V., NO. 35. August 30, 1888. WHOLE NO. 83.

CONTENTS.

	PAGE
Leading Article	413
Therapeutics	417
General Medicine and Pathology	419
Miscellaneous	424

LEADING ARTICLES.

On Perityphlitis.—The word perityphlitis, as commonly used, refers to any inflammation in the right iliac fossa, though that inflammation may be in the cæcum, in the vermiform appendix, or in the tissues about the cæcum.

Musser [1] gives the following definitions of the terms employed to designate an inflammation in the right iliac fossa: "By typhlitis is understood inflammation of the cæcum; by perityphlitis, inflammation of the peritoneum covering the cæcum; by paratyphlitis, inflammation of the connective tissue behind the cæcum. The term appendicitis is used for inflammation of the appendix; appendicular peritonitis for typhlitis of the appendix and its serous covering; and paratyphlitic, or pericæcal inflammation, for inflammation of the connective tissue around the appendix."

Fitz [2] says that for practical purposes all of these terms mean inflammation of the vermiform appendix. This view is also held by Morton.[3]

Treves [4] says in the majority of cases of so-called typhlitis the appendix is the cause of the trouble and that a perityphlitic abscess is usually an encysted peritonitis, due to perforation of the appendix rather than to disease of the cæcum. Fitz maintains that in the first week of perityphlitis there is, as Treves says, a circumscribed peritonitis.

Sands [5] recognizes in practice "four varieties of allied disorders." In the first set of cases an "inflammatory tumor" appears in the right iliac fossa, accompanied with fever, and sometimes nausea and vomiting. These cases terminate by resolution, and Sands expresses the belief that they are due to an inflammation of the appendix. The second set of cases are marked by the formation of a circumscribed abscess. This abscess he believes is, as a rule, outside of the peritoneal cavity and usually requires surgical interference. Its causation is not stated.

The third set of cases are really cases of perforative peritonitis rather than cases of perityphlitis, and are due to escape of fæcal matter from the perforated appendix, which sets up a general septic peritonitis. They require prompt surgical interference. The fourth class of cases are characterized by their obscurity, the symptoms being deceptive and indefinite.

Weir [6] believes that in many cases of perityphlitis there is a circumscribed intraperitoneal abscess, and he has, in several instances, been able to demonstrate on the median side of the abscess, adherent coils of small intestines forming its inner wall.

The causation of appendicitis may be a congenital malformation of the appendix, changes in the mesentery causing bending, the lodgment of foreign bodies or concretions which were allowed to remain on account of the feeble muscular coat of the tube.[7]

There may be a catarrhal inflammation of its mucous membrane causing stenosis,

[1] *Jour. Am. Med. Ass'n*, Jan. 21, 1888.
[2] *N. Y. Med. Jour.*, May 12, 1888.
[3] *Jour. Am. Med. Ass'n*, June 16, 1888.
[4] *British Med. Jour.*, Feb. 18, 1888.
[5] *N. Y. Med. Jour.*, Feb. 25, 1888.
[6] *Med. Record*, June 11, 1887.
[7] Treves. *Op. cit.*

if it does not already exist from one of the conditions above mentioned, accumulation of secretion, distention, ulceration, and perforation, and finally peritonitis with accumulation of pus in the right iliac fossa.[1]

Weir sketches the course that inflammation in the right iliac fossa may take as follows: "At times beginning with pain of great severity, symptoms of general peritonitis rapidly ensue, which, masking the iliac pain, quickly pass on to a fatal termination in from one to five or six days; or, in lieu of this latter, with almost equally marked constitutional disturbance, the general peritoneal tenderness, while considerable, remains overtopped by the original pain in the right side, and on its subsidence, as time passes, a tumefaction in the iliac fossa is revealed, which, with some recurrence of chills, progresses with fair rapidity toward the surface and soon shows itself unmistakably as an abscess. However, instead of this form there may be fairly sharp pain, infrequent vomiting, and some intestinal distension, but no general abdominal pain nor parietal rigidity, and with easily and early recognized right-sided swelling, which, with the usual symptoms, after a number of days shows itself to be an abscess. Or, finally, the patient may suffer with pain of a variable character, not always to be distinguished from that of the immediately preceding type, and with this a sensitive swelling is quickly felt, with moderate temperature-elevation, which latter promptly subsides under the use of anodynes, and throughout the course of the trouble but little inflammatory peritoneal symptoms are to be appreciated, though obstructive signs may be present. In this latter case resolution is common.

Pepper,[2] in discussing the diagnosis speaks of two classes of cases. In one the affection is more limited to the walls of the cæcum and the pericæcal connective tissue, and the appendix is affected to a comparatively slight degree, the vast majority of such cases terminating in resolution. In these cases he thinks that perforation has not occurred. They are marked by pain as the initial symptom, not intense, not accompanied with symptoms of collapse, though there are often nausea and vomiting and elevation of temperature gradually increasing till decided fever is present and considerable acceleration of the pulse. There is excruciating tenderness in the iliac fossa, a sense of fulness and induration, not rarely with dorsal decubitus and flexed thigh with constipation, possibly preceded by one or two irritative movements during the first day. In proportion as the induration and swelling are early and marked, it has seemed to him probable that the appendix is not seriously involved, but the affection is chiefly an inflammation of the walls of the cæcum and pericæcal connective tissue.

In the second class, the appendix is chiefly involved and is ulcerated or perforated. The symptoms are as follows: Intense pain, sometimes so severe as to cause collapse, occasionally such as to be followed by death in a few hours. Then come signs of rapidly developing peritonitis, frequent pulse, marked tenderness, tympanites, without induration and sometimes with no fulness in the right ileo-cæcal region. There may be only moderate febrile reaction for one, two, or three days with continued, moderate pain simulating an ordinary catarrhal attack with intestinal colic. For two or three days the symptoms may delude the attendant into the belief that the patient is not seriously ill, but after a time there are the symptoms of rapidly spreading peritonitis, and the case terminates in death from exhaustion in five to ten days.

There is usually less vomiting in these cases than in the milder ones. The whole abdomen is tender, but there is usually more tenderness in the right iliac fossa.

A rectal examination should always be made, as it is an important aid in making a diagnosis. If a fulness is detected on the right side, in the roof of the pelvis, it indicates an exudation which will end in abscess.

Bull[3] recommends the employment of a good-sized aspirating needle to determine positively whether or no pus is present in a suspected case. The needle should be passed from the lumbar region downward and forward toward the iliac fossa, if one passed directly into the fossa has failed to draw pus. Sands,[4] in 1880, expressed the same view, but in the article previously re-

[1] Smith, *Med. News*, May 26, 1888.
[2] *St. Louis Cour. Med.*, March, 1888.
[3] *Med. Record*, March, 1886.
[4] Quoted by Bull.

ferred to he says he is "inclined to discourage such explorations," fearing that they are becoming dangerously frequent, and that the peritoneum might become infected by such an exploration. Weir agrees with Bull in favor of using a needle to aid in the diagnosis, while Morton thinks, with Sands, that it is not safe.

In regard to the treatment of perityphlitis, Pepper says, referring to his first set of cases:

"If these cases are treated by absolute rest, abstinence from food, and absolute avoidance of interference with the state of the bowels, by local depletion, counter-irritation followed by application of ice-bag or warm fomentations, and the internal administration of opium and mercury commenced early, the vast majority terminate in resolution and complete recovery."

Morton differs somewhat from this plan in cases where no pus has yet formed, for in the same journal [1] he says the treatment should consist of rest in bed, restriction of diet to nourishing liquids, hot poultices or fomentations frequently replaced upon the parts, perhaps local depletion, and possibly the hypodermatic exhibition of morphine, to control pain; while the bowels should be kept open and free from accumulations of gas and fæces by the administration of salines and enemas—perhaps with the addition of turpentine to the latter.

Davis,[2] of Chicago, is opposed to any attempt to move the bowels in the early stage of perityphlitis and has had almost universal success with the early use of from six to eight leeches applied over the cæcum, the administration per rectum of 30 grains of hydrate of chloral and 30 drops of tincture of belladonna in four ounces of warm water. If this is followed by relief of tenderness, at the end of twenty-four hours an enema of warm water is to be given. If, after one or two enemas have been given tenderness increases, no more should be given, but an anodyne and arterial sedative, fomentations being kept up for twenty hours more, and then, if there is less pain, another enema or a mild laxative may be given.

In cases where an abscess has formed, all writers are agreed that it should be evacuated. As to the time for surgical interference and the place of incision there are different views held.

Richardson [3] is in favor of operating as soon as the presence of pus is suspected, and favors an incision parallel and close to Poupart's ligament, commencing at the middle and extendlng as far backward as necessary when the collection is thought to be extra-peritoneal.

Weir [4] says: "As soon as it can be recognized pus should be evacuated extra-peritoneally, if possible, or by a lateral laparotomy, and the cavity drained."

Morton recommends an incision beginning at a point an inch above Poupart's ligament and to the outer side of the right linea semilunaris, and carried in a vertical direction about four inches. This should be continued through the abdominal wall till pus, cæcum, or the peritoneum over that structure be reached.

Sands [5] inclines to a late operation, toward the end of the second week, but would operate early if a positive diagnosis could be safely made. In such a case he would perform an extra-peritoneal operation.

If there are symptoms of a general peritonitis developing from a lesion in the right iliac fossa, all writers seem to agree that laparotomy should be at once performed, and the incision made to the outer side of the right linea semilunaris. This incision gives the best access to the cæcum and the appendix. If the appendix is ulcerated or perforated, it should be ligated and excised. If there are ulcers or perforations in the cæcum, the former should be turned in, the latter closed, by Lembert's sutures. GEORGE B. PHELPS, M.D.

On Cystoscopy.—There is probably no surgical instrument of recent invention which is so likely to play an important part in the diagnosis of obscure disease and symptoms as the cystoscope of Nitze and Leiter. The instrument consists practically of a hollow silver tube shaped like a catheter, in the beak of which is a transparent quartz window. Running through the shank are two insulated wires, to be connected with a battery, and terminating in a platinum wire situated in the beak of the instrument. This platinum wire is rendered incandescent by an electric current. At

[1] *St. Louis Cour. Med.*, March, 1888.
[2] *West. Med. Report*, Jan., 1888.
[3] *Boston Med. and Surg. Jour.*, Jan., 1888.
[4] *Op. cit.*
[5] *Med. Rec.*, Feb. 25, 1888.

the junction of the beak and shank is a prism acting as a mirror, which reflects the rays to a telescope situated in the shank, and into which the observer looks. The instruments of Nitze and Leiter are similar, differing only in detail. The Nitze instrument is not quite as handy for use and is larger, the platinum wire being surrounded with pipes through which water runs to keep the instrument cool; but the light is higher and the area of surface seen through the telescope larger (nearly the size of a silver dollar) than in Leiter's cystoscope. The instrument receives its name from the use to which it is put, viz.: to explore the interior of the bladder, but to do this safely and satisfactorily, attention must be paid to the following conditions: The electric current should be supplied by a bichromate battery of from four to eight cells.[1] The urethra should easily admit a 23 F. catheter. The bladder should contain from six to eight ounces of fluid, otherwise the heat generated by the lamp is likely to injure the wall of that organ. This fluid should be clear or nearly so, and a little air above the fluid will give a clearer view of the upper walls.[2] The instrument should be passed into the bladder before the current is completed, and broken before it is withdrawn. This is especially important in using Leiter's cystoscope, for the amount of heat generated would injure the urethra.

Much practice is required before the bladder can be satisfactorily inspected with this instrument; but by gentle movements, which can only be learned by frequent observation and practice, each portion of its wall can be thoroughly examined. Care should be taken not to let the beak of the instrument remain over a few seconds in one position, for fear of injuring the adjacent wall of the bladder.

Clinically speaking, the inferior and posterior walls of the bladder are the most important areas for cystoscopic examination. There are two main difficulties frequently met with in making such examinations, viz.: the irritability of the bladder and the bloody or muddy condition of its contents. The former may usually be overcome by injecting a ten-per-cent solution of cocaine into the bladder; but blood in the urine often renders the examination negative. Washing out the bladder with a weak saline solution may be all that is required; but if not, Otis[3] recommends using glycerine, or some such substance, with which blood does not mingle readily. The cystoscope is very useful in assisting the physician in diagnosing affections of the bladder and kidneys.

The opening of the ureters can be plainly seen, and the urine entering the bladder in little jets every three to sixty seconds. It is thus possible to tell the condition of the urine as it enters the bladder from the kidneys,—whether it is bloody or clean, in case of hæmaturia; or transparent or cloudy, in case of pyuria; and the kidney from which it flows.

By passing a catheter beside the instrument we can see to guide it into the orifices of the ureters,—an operation which hitherto has been very unsuccessful,—and thus are enabled to examine the urine from either kidney at will.

The walls of the bladder can be carefully inspected and seen to be in either a normal or unhealthy condition. Different forms of catarrh, acute, chronic, hemorrhagic, diphtheritic, or tuberculous, may thus be diagnosed. Tumors, if present, many of which it would be impossible to make out by means of sounds, digital examination, or by examination of the urine, may be plainly seen and diagnosed by the cystoscope so early that treatment will be much more satisfactory than it has been heretofore. The presence of stone or other foreign bodies in the bladder is made a matter of positive diagnosis, and their position localized so exactly, that operations are less difficult and more successful. The cystoscope is of the greatest utility after the operation of crushing, to enable the operator to see that all of the stone has been removed. It may help in diagnosing a doubtful case of rupture of the bladder, and also in localizing the seat of rupture.

Fenwick[4] considers the chief use of this instrument is in diagnosing the seat of hemorrhage in hæmaturia—whether urethral, vesical, or renal,—and of pyuria.

[1] Sir Henry Thompson on Leiter's Endoscope, *British Med. Jour.*, April 14, 1888.

[2] Dr. Willy Meyer on Cystoscopy.—*N. Y. Med. Jour.*, April 21, 1888.

[3] F. N. Otis on Diagnosis of Bladder Tumors by Leiter's Endoscope.—*Medical Record*, May 5, 1888.

[4] E. H. Fenwick on the Value of Illumination of the Urinary Bladder in the Diagnosis of Obscure Vesical Disease.—*Brit. Med. Jour.*, April 14, 1888.

The cystoscope is to a physician what the mirror is to a dentist,—it enables him to see the cause of trouble and to guide his instruments in relieving it.

The following very instructive case, reported by Dr. Willy Meyer,[1] shows most clearly the prominent part the cystoscope plays in the diagnosis of obscure diseases of the urinary system, and what may be expected of it in the future.

L. T., 23 years. First gonorrhœic infection, ten years ago; second, last year. Complications with prostatitis, catarrh of the neck, afterward of the whole bladder; symptoms of stricture. The necessary treatment was ordered, and the bladder washed for eight months. No material benefit. In the course of treatment, about seven months ago, a marked chill of ten minutes' duration set in, with pains in the right lumbar region. Since that day there has been a large amount of pus in the urine, sometimes the sixth of the whole quantity. Soon a good deal of albumen was found, and, the diagnosis being made as pyelonephritis ascendens, the prognosis, of course, was very doubtful. In the beginning of February the patient came to my office. I found stricture of the pendulous and membranous portion of the urethra, large prostate, painful on pressure, and urine with a large amount of pus and mucus, very few cells, resembling those of the pelvis of the kidney, prostate corpuscles. No pain in urinating, no blood, no sudden stop in the flow of urine. The patient being opposed to any direct surgical interference, I had to content myself with widening his strictures by the introduction of steel sounds and with internal treatment, keeping in view internal urethrotomy and drainage of the bladder, or, as soon as it could be diagnosticated whether both kidneys were affected or only one, nephrotomy. A careful examination of the bladder revealed nothing at all, the same result the other colleagues had had before me. At that time I received Leiter's cystoscope, and at once resolved to look into this bladder. Without any difficulty I saw there two, dark-brown, even stones, of the size of a hazel-nut, lying in the groove behind the swollen prostate. With the beak of the instrument I succeeded in throwing them out into the fundus, where I could easily percuss them, finding them very hard. A large, snow-white piece of coagulated mucus was lying at their side, its slender, dentritic ramifications floating in the fluid. The mucous membrane of the bladder was more or less healthy. Only here and there I saw a purple-colored spot with an adherent flake of mucus.

CONDICT W. CUTLER, M.D.

[1] *New York Medical Journal*, April 21, 1888.

THERAPEUTICS.

Stewart (D. D.) on a Case of Remarkable Tolerance of Nitro-Glycerine.—The patient was a man of 26, suffering from chronic parenchymatous nephritis. He had œdema of the face and legs, passed a small quantity of albuminous urine of high specific gravity containing casts, and had slight hypertrophy of the heart with beginning arterio-capillary fibrosis.

On March 26th he was put on a 1 % solution of nitro-glycerine, commencing at a one-minim dose, which was to be gradually increased. In one month he was taking 23 minims (gtt. xlvi.) when he was put on a 5 % solution. July 22d he was taking one drachm and five minims (gtt. cxxx) of the 5 % solution four times a day, making an equivalent of 13 minims of pure nitro-glycerine in 24 hours, with no effect except a moderately flushed, dusky face, a dicrotic pulse of 120, and a feeling of muscular weakness and incapacity for exertion, especially for using the arm. Headache was only noticed for the first few days. The skin, naturally sallow, became dusky, which the author attributed to the deficient oxidation of the blood. Under this treatment decided improvement took place in the patient's condition. The dropsy disappeared, the urine increased, and the albumen diminished, while no casts could be found in the last specimen examined. It should be stated that he was taking all the time sodium-gold chloride in $\frac{1}{16}$ gr. doses and part of the time the oil erigeron.—*Polyclinic*, Aug., 1888.

Cupp (M. F.) on the Relation of Excretion to the Administration of Stimulants and Medicines.—It is useless and injurious to attempt the herculean task of *forcing* the blood through tissues and organs engorged with the products of decomposition. Give laxatives if needed, with salines or acids, such diaphoretics as seem appropriate to the patient's *condition*, and *prevent* the exhaustion of the vital

powers by moderating the body temperature. Do not permit your patient's nervous and muscular systems to burn out with fever, and then attempt to whip them into renewed life and energy by administering alcohol and quinine until the brain, overpowered, gives way, and he sinks under the combined influence of disease and drugs. In continuation of the above plan, after the heart begins to show signs of flagging, take off all the extra work possible. Administer nourishment, if the stomach is in a condition to receive it, in small quantities and concentrated form. The cardiac failure will likely manifest itself at intervals—in fact, generally following a well-known law of depressed energy with a resulting reaction. Watch for the moments of weakness. Now a tablespoonful of wine will remove the distress, and may be followed by refreshing slumber. You do not overstimulate the muscular and nervous excitability of the heart, but simply assist it in recovering more speedily from its state of depression. The more profound, as a rule, is the depression, the greater the reactionary excitement, and the greater the latter, the more intense will be the succeeding depression. This vicious circle must, if possible, be avoided. By shortening the duration of the depression, the danger of a subsequent failure following inordinate reaction is greatly diminished. This may sometimes be more satisfactorily accomplished by means of atropia sulphate, aromatic spirit of ammonia, subcutaneous injection of ether, application of heat to the head, or over the precordia, and hot saline enemata, as recently reported. Not the name of the affection, but the state of the subject, must determine which of these measures should be selected in each individual case.—*Med. Register*, Aug. 18, 1888.

Manby (F. E.) on Sulphurous Acid Fumigation in Whooping-Cough.—The children are in the morning put in clean clothes and removed elsewhere. All their clothes, toys, etc., are brought into their bedroom, and sulphur is burnt upon a few live coals in the middle of the room. The fire is allowed to remain in the room for five hours, and then the windows and doors are thrown open. The child sleeps in the room the same evening. About 25 grammes (a little under an ounce) of sulphur to every cubic metre may be burnt; this is equivalent to rather more than 10 grains per cubic foot. The additional precaution was taken of having the day-room fumigated in a like manner during the night—the children practically lived in an atmosphere of diluted sulphurous acid gas for some days, while in several cases I had the process repeated at the end of a week.

In every instance without exception my observation leads me to look upon the method as a practical cure for whooping-cough. Cough is lessened in frequency, expectoration of the thick clogging mucus much facilitated, paroxysms lessened in violence, and sickness after them as a consequence scarcely known. The children pick up quickly, and in no case has the cough lasted in its form of reduced violence more than a fortnight after the treatment commenced; it gradually but surely abates and ceases. I have had no specially severe bronchitic or pneumoic complications to deal with in the twenty or more cases in which I have applied the treatment, but I do not think I should desist if such complications existed.

The action of the sulphur must be that of a germicide, and in twenty-five years' experience I have seen nothing like such results from any other kind of treatment.—*Practitioner*, Aug., 1888.

Earley (C. R.) on the Treatment of Snake Bites.—I have treated many cases, and have a record of twenty-five very bad cases, all of which were treated by the free use of olive oil internally and externally. I have never directed any other treatment. The inhabitants of locations where rattlesnakes and copperheads are found always keep a good supply of olive oil in their houses, and when bitten never call a doctor, but use olive oil freely, which in every case gives full and complete relief. Therefore my experience for the past thirty-eight years has fully proven the correctness of the treatment with olive oil of Dr. Miller,[1] of South Carolina.—*Coll. and Clin. Record*, Aug., 1888.

Stewart (J. P.) on Epileptiform Convulsions Following the Use of Cocaine in the Urethra.—Preliminary to the dilatation of a stricture in a man of 32 the author injected 3 iss of a 4 % solution of cocaine. The subsequent manifestations are narrated in the writer's own words.

With an Otis dilating urethrotome I proceeded to cut meatus and ante-

[1] *N. Y. Med. Repository*, vol. ii., p. 242.

rior strictures and dilate canal quite thoroughly.

I then passed a steel sound, No. 30 F., to the neck of bladder only, and after removing it, patient sat up. He almost immediately said "I feel sick," stiffened out and became unconscious, with widely dilated pupils and rapid and feeble pulse. This condition lasted, perhaps, one minute, when he recovered his senses, though very much dazed, and said: "What is the matter? I feel very queer."

Then, after a moment or two, he said "I feel badly again," and sank back on the table and became unconscious. He again became perfectly rigid, but this time went on to have violent general convulsions, almost throwing himself from the table. The convulsions were clonic, beginning in face and extending over the whole body, and there was, throughout, partial suspension of respiration and increasing rapidity and weakness of the heart's action. The convulsion lasted, perhaps, two or three minutes, and the patient became deeply cyanosed and then very gradually recovered consciousness, it being about an hour before he was able to leave the office, though there was no repetition of the convulsion.

I saw him repeatedly afterward, and dilated his urethra with the Otis and steel sounds without cocaine and without any disagreeable symptoms, though my having put him on bromide of soda. gr. xxx, t. i. d., may have influenced this.

After closely questioning him I obtained an obscure history of epilepsy showing itself as *petit mal*, and concluded that I had to deal with a simple case of epilepsy, and that the convulsion had been caused by the excitement of the operation, perhaps influenced by some specific action of the cocaine.

In closing, I should like to suggest as a query, to our neurologists, whether cocaine may not have some specific action in precipitating the epileptic attack in predisposed subjects.—*Med. News*, Aug. 18, 1888.

Combined Chloroform and Cocaine Anæsthesia.—Obalinski, thinking that he saw an antagonism between chloroform and cocaine, determined to take advantage of it in anæsthesia for operative purposes, and has now employed the combined chloroform and cocaine method in twenty-four cases with, as he states, the most satisfactory results. He first administers chloroform until the stage of tolerance is reached, which is generally in from four to twelve minutes, with the use of from one to three drachms of chloroform. He then injects into the region about to be operated on a solution of cocaine of the strength of from 3 to 5 per cent., the total quantity of cocaine injected being from three- to five-sevenths of a grain. Even more than this might, he thinks, be safely used, both because chloroform is the best antagonist to cocaine[1] and because part of the cocaine is about to be removed from the body by the operation. After the injection no more chloroform is as a rule given, unless in protracted operations, when very small quantities are administered at considerable intervals. For this method several advantages are claimed, amongst others the following: a smaller quantity of chloroform is sufficient; vomiting is very rare; the depression on awaking is much slighter than when chloroform only is used. The only disagreeable symptoms have been excitement and throwing about of the arms in some nervous people, but as this occurs when chloroform alone is used, it is not at all certain that it ought to be ascribed to the cocaine.—*Lancet*, Aug. 4, 1888.

GENERAL MEDICINE AND PATHOLOGY.

Wilks (S.) on Epilepsy and Migraine.—Judging from what I hear and read, antipyrin has been as great a failure in the relief of epilepsy as it has been a success in migraine. I have now used this drug for nearly two years, and having seen its remarkable power in arresting attacks of headache, I can fully corroborate the high opinion held by the profession generally as to its merits. It has, however, by no means superseded other well-known remedies in their more enduring effect in the cure of this disease. As regards the power of antipyrin in epilepsy the result is very different, as not unexpected by me, who never have been able to discern the analogy between the two diseases, and which suggested the trial of the same remedy for both. This is no new opinion of mine, but if not hitherto expressed it has been out of

[1] It is difficult to see upon what data he bases his theory of antagonism.—Ed.

deference to the great names of those who, in their writings, have associated the two diseases together. I have never myself seen the resemblance, but, on the other hand, have observed many and considerable dissimilarities. The only plausible reason for linking them together is their paroxysmal character; that is, persons who may be well to-day may have a fit or attack of migraine to-morrow; but the very difference in the nature of the paroxysm seems to me sufficient to dissociate them. In the one case, the patient may be as well as ever one moment, and the next moment may have fallen unconsciously down without there having been any warning of the occurrence; whereas, in the other case, the attack is approaching for hours, and very often some well-known cause has developed it. Nay, further, a migrainous person may, in the performance of some duty, predict an attack with certainty; he may, indeed, induce it. Then as regards the symptoms, there is nothing in common between them. The attacks are not only altogether unlike, but the epileptic, as a rule, is not a sufferer from headache; nor does the migraine patient become epileptic. Some years ago I took the trouble to ask the question of epileptics, and the almost invariable answer was that they did not suffer from headache. This is a very important and practical point, for if headache was present, it proved the case to be one not of simple epilepsy, but of fits due to injury, syphilis, or other cerebral disease; and which was often cured by the iodides and mercury when the bromides had failed. Then, on the other hand, I have no history of a migrainous patient becoming an epileptic. Amongst a large number of cases, I only remember one where there was a suspicion of the two maladies existing together. In answer to what I have stated, it would be maintained by those who regard the two affections as allied, that they admit the difference between the phenomena of migraine and epilepsy, but, nevertheless, they have a common pathology. This remarkable theory seems scarcely warranted by our ordinary mode of reasoning about cause and effect. The only plausible reason for such an opinion ought to be founded on the observation that the migrainous patient often becomes epileptic, or the reverse; but, as I have already stated, this is not true. It might also be maintained that the two affections are seen occurring in members of the same family. 'Now this, from a very long experience, I also deny. I know many families subject to migraine, but in none is there a single member epileptic. And more than this; the opposite fact is true, that the two diseases attach themselves to a totally different class of persons. Moreover, there seems no good reason why the two diseases should be thought to have the same seat; in epilepsy it is proved that the brain is the seat of the explosion which causes the phenomena, whilst this is by no means certain in the case of migraine. Here the patient is bodily ill, his pupils are contracted, and thus unlike the dilatation of epilepsy; his stomach and bowels are deranged; his heart's action is depressed; he is cold and shivering, and apparently his whole ganglionic system is at fault. In a word, I see no resemblance between an attack of migraine and epilepsy. I observe they never pass the one into the other, they do not occur in the same families or in the same class of persons, and the remedies which relieves the two diseases are different.—*Lancet*, Aug. 11, 1888.

A Valuable Remedy for Chronic Diarrhœa.—Many years ago I suffered severely from that trouble; I considered it incurable. Being in Paris, one of the best physicians there assured me it could be cured by a diet of racahout, and it was.

Afterward here I found one could not get the acorn meal that forms the active part, but knowing that its usefulness must depend on the tannin it contains, I tried substituting it as follows:

Powdered chocolate, pure	½ lb.
Rice flour	½ "
Powdered sugar	½ "
Tannin	½ oz. (120 grs.)

The tannin, or the rest, separately, have little effect. Together they restore the tone of the alimentary canal and nourish as well as cure.

One thing is *essential*, that is, long cooking—not less than half an hour. If simply boiled a few minutes, the harsh taste of the tannin is very strong; with a good half hour's cooking, it disappears *wholly*—it is impossible to distinguish the medicine from ordinary broma. I think this has something to do with its curative powers and with the ease of digestion by the most irritable stomach. The remedy is too valuable not to be more widely known.

The amount to be taken is a teacupful morning and evening at meals.—

Anonymous letter to *Med. News*, Aug. 4, 1888.

The Treatment of Sleeplessness.—A sufferer from this uncomfortable symptom has found the following to be an effectual remedy in his own case. After taking a deep inspiration he holds his breath till discomfort is felt, then repeats the process a second and a third time. As a rule, this is enough to procure sleep. A slight degree of asphyxia is thus relied on as a soporific agent, but the theoretical correctness of this method is somewhat open to question. Certainly there is proof to show that the daily expenditure of oxygen is most active during the waking period, and that nightly sleep appears to coincide with a period of deficient tissue oxygenation. It is at least as probable, however, that other influences are associated with the production and timely recurrence of sleep besides that just referred to. This plan, moreover, however effectual and beneficial in the case of its author, is not without its disadvantages. The tendency of deficient oxygenation is to increase blood-pressure and to slow the heart's action. With a normal organ, as an occasional occurrence, this might not be of much consequence. If, however, the impeded heart should also be enfeebled by disease, the experiment might be repeated once too often.—*Lancet*, Aug. 11, 1888.

Sweeting (R. D. R.) on the Increase of Scarlatinal Nephritis.—Noticing an increase in the percentage of albuminurics among scarlatina patients treated at the Western District Hospital, London,—from 14 per cent. in 1882 to 34.9 per cent. in 1887,—the medical superintendent has sought an explanation of the same.

He eliminates the season of the year as a causative factor, and also imperfect ventilation. As a final result of his studies he decides, to his own satisfaction, that a diminished cubic space, in other words, overcrowding the wards, is responsible for this increased percentage of albuminuria. It may be noted here that Dr. Thorne Thorne, late physician to the London Fever Hospital, in a recent paper, referring to the importance of ample air-space for the sick, says[1]: "There have been occasions when, owing to repairs or otherwise, it has been found necessary, as a temporary measure, to exceed the number of patients properly allotted to one or other ward, and when this has been the case the practice has almost invariably been followed by an increase in the number of patients exhibiting albumen in the urine." So that the experience at the Western Hospital is by no means unique, but has been found to obtain at the London Fever Hospital also.—*Practitioner*, Aug., 1888.

Edes (R. T.) on Large-Celled Sarcoma of the Lumbar Vertebræ.—Attacks of supposed sciatica for some years. Paraplegia dolorosa. Extreme pain on movement. Curvature at level of last dorsal and first lumbar vertebræ. Tumor in the back. Vomiting. Death. Dilatation of the stomach. Destruction of the bodies of the second and third lumbar vertebræ by a giant-celled sarcoma which also formed a large tumor on each side of the vetebral column.

A married woman, 35 years old, had a difficult labor with her only child, now 7 years old. Soon after she had a tender spot in her back. Four or five years ago she had some attacks of sciatica, lasting a few days, which early in 1886 began to be more severe and continuous. In May she went to New York to consult a physician, but when she arrived the pain disappeared, so that she went shopping and to the theatre instead. The pain soon returned, however, attended with numbness and uncertainty of gait.

Late in 1886 her husband was informed of a curvature of the spine which, however, the physicians said they had been aware of since September, but as it was not painful and was only slight, it was supposed to be congenital or due to an old caries. A fulness in the side was noted at the same time.

During a part of the time she was in the hospital she was able to walk about and ride out, but in November she had to get up very carefully. On December 9th she was moved from one bed to another and then became almost completely paralyzed, and soon after completely so in the lower limbs. From this time she had her alternations of improvement and the reverse, but with the balance on the wrong side. In June last the swelling in the left back below the rib was punctured, but only a few drops of pus obtained. Attempts were made to fix the spine by apparatus, but it could not be borne.

When first seen by me, in October, she

[1] *Practitioner*, Dec., 1887.

had been in bed nearly a year. She was greatly emaciated, but no more anæmic than would be expected from her condition, and there was nothing to indicate the so-called cancerous cachexia. Her lower limbs lay almost motionless, supported and protected with the greatest care. There was a little movement of the toes and feet possible. There was great pain about the hips and running down the legs, which was greatly aggravated by the slightest movement and often by the slightest pressure, or even contact. The sciatic and sometimes the anterior crural nerve on the right side were painful on pressure, and at times the whole surface seemed hyperæsthetic. Movements of the arms perfect but often painful. There was a bed-sore over the sacrum, and to dress this and change the bedding she was several times etherized and raised, this procedure being followed by extreme pain lasting for hours.

The functions of the bladder and rectum were sluggish, but there was no loss of control. Appetite and digestion fair, but considerable trouble from constipation and flatulence.

The urine at times contained a large amount of phosphate and carbonate of lime, with mucus and no pus. Once an excess of indican was noted. There was at no time any fever.

For several weeks she improved considerably and got a very good appetite, with less constant pain down the legs and less tenderness. She used a little morphine, on one or two nights none at all, and some codeia.

On the night of December 20th she took antipyrin for the relief of pain, which gave her a good night and no nausea. During the forenoon of the next day she began to vomit a greenish and brownish fluid, which after more than twenty-four hours became stercoraceous in smell. I found the bacteria of putrefaction therein. The abdomen became tense and tympanitic at the upper part, the vomiting was relieved by nothing but morphine, and she died while partly under its influence.

The autopsy showed the stomach to be greatly dilated, sagging down nearly to the pubis, half filled with a brownish fluid and much gas.

There was nothing remarkable about the appearance of the liver, spleen, or intestines. The ureters passed over the surface of the tumors soon to be described, but they were nowhere either strictured or dilated. In the right kidney was a little turbid fluid, one stone as large as a small chestnut, and a good many smaller ones; otherwise both were healthy.

The specimen shown consisted of the last dorsal and what remains of the upper lumbar vertebræ, sawn longitudinally.

On both sides the last dorsal vertebra is intact.

The first lumbar is little affected on the right side, except two little spots of erosion of the body. On the left the transverse and articulating processes have disappeared, and are replaced by this soft reddish mass. The second lumbar has almost entirely disappeared, nothing remaining but a thin, gritty lamella between two fibro-cartilages, which are displaced but not destroyed, and a little piece of the end of the spinous process connected with the supra-spinous ligament.

The third lumbar is represented as to its body by a reddish pulp between two fibro-cartilages, and by the whole spinous process and some fragments of the articulating processes on each side.

A new growth occupies the angles formed by the sliding back of the first vertebra, and similar growths between and eroding the arches encroach on the spinal canal. The narrowest point is just below the termination of the spinal cord, so that it was not pressed upon, and there was enough room left to permit the passage of the cauda equina, which appeared to the naked eye normal. On each side and closely connected with the bone is a large rounded tumor, as large as one fist on the right side, and two fists on the left. It is this latter which pressed through below the rib and was felt during life. Upon its posterior surface is a mass of inspissated blood; in its outer margin are calcified patches. The central portion of the growth seems to be situated beneath the periosteum.

There were no secondary growths found, and no enlargement of the glands. By inadvertence the liver was not incised.

The structure of the new growth is that of a giant-celled sarcoma.—*Jour. Am. Med. Ass'n*, April 21, 1888.

Taylor (R. N.) on Tubercular Testes Followed by Meningitis.—While at work, February 20th, W. L., aged seventeen years, fell in such a way as to hurt his private parts, not severely at all, but still he thinks he did get hurt there, for

upon investigating he found a lump at upper end of right testicle. Close questioning rendered it probable that he had hurt himself very slightly, if at all, only enough to attract attention to that region when the lump was discovered. He had suffered with headache for four weeks, and on February 24th the pain became much worse in the front of the head; he went to bed; the pain was treated as neuralgia for fourteen days, or up to March 8th, when he was seen by the writer, at which time his condition was as follows: Pain in head very severe, especially in frontal region, extending up on both sides of the cranium; there was great intolerance of light, the face either buried in the pillows or covered with a handkerchief; he was rational, answering all questions intelligently, but there was a marked apathy, a listlessness in his manner, and facial expression very striking; pupils contracted, and so continued when protected from light. Temperature 101° F., pulse 55 and irregular, tongue coated white, appetite *nil*, bowels constipated; hair upon pubes long, fine, silky. The right testicle had, growing from its upper extremity, a tumor the size of a hazel-nut; hard, circumscribed, nodular, painless, presenting no signs of acute inflammatory action, well defined and distinct from surrounding tissue, simply a hard, lumpy growth upon the upper end of the testicle.

There was no tuberculosis in family history, and no sign of deposit at either lung apex.

The symptoms were all slightly more pronounced than on the 8th. The boy was still rational, the only change noted being that the pulse-rate had increased to 62.

Seeing him again on the 11th instant, the pulse was 65, temperature 101°. Pupils now dilated some, left being larger, not responding to light; apathy deeper, pain severe, as indicated by an oft-repeated sharp cry. Thus he continued to grow worse daily, the apathy deepening into profound coma as effusion progressed, with a wide dilatation of the pupils, and increase of the pulse-rate to 110, finally reaching 120 just before death, death occurring at mid-day on the 18th. No autopsy could be obtained.—*Am. Pract. and News*, June 9, 1888.

Ingle (A.) on a Case of Cerebellar Hemorrhage.—The patient was a widow, aged 63. Ten years before she had an attack of paralysis on the left side, from which she recovered, the only remaining defect being a slight lisp. She had been subject to bilious attacks, and had often complained of giddiness in the head. On February 12, 1888, she walked a mile to chapel, sat the service out, and afterwards it was noticed she was looking unwell. She walked into the vestry, thinking one of her bilious attacks was coming on, but feeling much worse in the course of an hour, she was helped to a neighbor's house, and soon afterwards vomited. She was put to bed, and became very drowsy. Several attacks of vomiting occurred during the day. She would mutter replies to questions, but one could get but very little information from her. She complained of no pain but headache. There was some retraction of the head; pulse 88, regular, fair volume and strength; arteries somewhat atheromatous; the first sound of the heart was not quite clear, but there was no definite murmur; the pupils were equal and active to light: no arcus senilis, no loss of power or sensation. Next day her condition was unchanged, but there was no further vomiting. On the 17th there was some loss of power in the left arm, and the urine occasionally dribbled away; the patient lay in a drowsy condition, but seemed to hear whatever was said in the room, and would occasionally interpose a remark. By the 20th the left arm was entirely paralyzed, also some muscles on the left side of the face. Two or three days later the tongue was protruded to the right. She lingered till the 27th—fifteen days from the commencement—occasionally passing for several hours into a comatose state (once for forty hours), when she would be perfectly still, taking nothing, and not being able to be roused. For the last forty-eight hours she was in this condition. There was no evidence of loss of co-ordination. The following were the notes of the post-mortem examination: Very thin and soft skull. Much senile atrophy of convolutions and accumulation of subarachnoid fluid. No softening or lesion on exterior. Occupying position of right claustrum was a small cyst three-quarters of an inch deep by one-sixth inch broad, containing clear, serous-looking fluid. In left cerebellar hemisphere was large hemorrhage, chiefly in region of convolutions, involving only posterior part of whole cor-

tex. This extended a little to the right of the middle line. There was, besides, a small hemorrhagic softening in posterior wall of posterior cornu of right lateral ventricle, but no blood in ventricles. Much atheroma of cerebral arteries.—*Br. Med. Jour.*, June 16, 1888.

Wylie (W.) on a Case of Entire Absence of Both Mammæ in a Female, Aged 21 Years.—The girl is unmarried, but has given birth to a healthy male child three months ago. Dr. Lyall attended her in confinement, which was quite natural in every respect, and she has made an excellent recovery. There are no mammary glands, and no trace of any thing at all resembling them. She has, consequently, been unable to nurse her child. A small mole exists near where the right nipple should be found, and the pectoral muscle seems quite bare of adipose tissue in that neighborhood. Of course there has been no trace of milk, and she has suffered from no sympathetic pain or uneasiness of any kind in that region.

Her mother tells me that she was aware of the fact that she had no breasts, but that she had always enjoyed good health and menstruated regularly from the age of 15 years.

I am not aware of mention of absence of these glands having been made by any medical men who are authorities in obstetric medicine.—*Br. Med. Jour.*, Aug. 4, 1888.

Leucocytes and Microbes.—Some interesting observations have recently been made on the attitude of the corpuscles contained in the lymph of frogs, towards microbes, and towards the *bacillus subtilis* in particular. A regular fight takes place between the leucocytes and the bacilli. When they come into proximity, the white corpuscle extends itself, and grasps one end of the bacillus, to which it imparts a lateral movement. Gradually it elongates itself, and envelops the bacillus in a tube of protoplasm, other leucocytes come to the help of the first, and the bacillus is absorbed and destroyed. The number of bacilli which a single leucocyte can ingest does not seem to be limited. Its voracity has no bounds. Some have been seen to devour from forty to sixty bacilli, and have been so stuffed with them that the homogeneity of the protoplasm was interfered with. As a rule, however, after consuming some five or six of the invaders, the leucocytes take a period of repose followed by a renewal of activity. The observations by M. Gallemaerts on the bacillus subtilis coincide with those of M. Metschnikoff on the bacillus anthracis.—*Med. Press*, June 27, 1888.

MISCELLANEOUS.

Polk (W. M.) on Death from Acute Salpingitis, Peritonitis, and Endometritis, Due to the Use of the Sound.—I performed Alexander's operation six weeks ago, and three weeks and five days after the operation, on testing the position of the uterus, I used a sound which had lost its nickel-plating and should not have been used in the case. The patient immediately began to develop symptoms which terminated in her death. The operation, so far as having any thing to do with her death, was not followed by any reaction whatever. This can be seen on the temperature chart (exhibited), the temperature commencing to rise immediately after the introduction of the sound until the time of death. The sound was introduced on Friday, and the patient died about six days afterwards. At the autopsy the evidences of salpingitis and peritonitis were distinct, but there was absolutely no evidence of any inflammatory reaction in the field of the operation, at least to the naked eye. It was distinctly noticed how well adhesion had taken place ; union was perfect. The tract from the external ring down to the cornua of the uterus was found in an absolutely perfect condition. Union was so strong that it was torn with difficulty. This shows that after six weeks union is sufficiently strong to bear considerable strain.—*Am. Jour. Obstetrics*, etc., August, 1888.

Schadle (J. E.) on a Peculiar Effect of Cocaine.—Preparatory to an intranasal operation, pledgets of cotton saturated with a 4 % solution of cocaine were introduced into the nostrils on several occasions. On each application the patient, a man of 35, mentioned a cold, "gone," relaxed feeling about the external genitals and a sensation as if the penis was absent. Towards the end of treatment he noticed a permanent weakness of the sexual organs, and finally seminal losses and impotence set in and continued until the cocaine was entirely withheld.—*Medical Register*, Aug. 11, 1888.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of

CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital; CONDICT W. CUTLER, M.D., Instructor in Diseases of the Skin, Post-Graduate Medical School, New York; JOHN D. HAWLEY, M.D., Attending Gynæcologist, New York Hospital, Out-Patient Department; FREDERICK PETERSON, M.D., Lecturer on Nervous Diseases at the New York Polyclinic.

VOL. V., No. 36. September 6, 1888. WHOLE No. 84.

CONTENTS.

	PAGE
Leading Article	425
Therapeutics	427
Pathology	430
Surgery	433
Miscellaneous	435

LEADING ARTICLE.

Club-Foot.—Dr. Charles L. Scudder[1] reports two cases of congenital talipes equino-varus, in which careful dissections and measurements were made. The first was born at term, measured forty-eight centimetres in length, weighed three thousand nine hundred and forty grammes, and presented the following pathological appearances: A posterior hydrencephalocele, three small supernumerary spleens, a fleshy knob upon the end of the tongue, a cleft uvula and epiglottis, a fibrous appearance of the edge of the liver, six fingers upon each hand, six toes upon each foot, clubbed hands, and double talipes equino-varus.

The os calcis occupied an oblique position, the tuberosity being drawn upward in close proximity to the fibula side of the leg. The neck of the astragalus was turned inward, instead of being straight. Scarpa, 1803, does not admit deformity in this bone; and the elder Little, of London, agrees with him. Adams, however, in 1852, described important alterations in the astragalus. The scaphoid was drawn inwards and upwards. The outer edge of the cuboid was depressed from its normal relaton to the os calcis. The deltoid and posterior ligaments of the ankle joint were adaptively shortened. There was no shortening of the plantar fascia. The resistance to complete reduction was due, in great measure, to ligamentous rigidity and shortening. All the tendons in front of the ankle were inclined to the inner side of the leg. The tendons behind the inner malleolus preserved their normal relations. The tendons that are normally behind the external malleolus were upon, and in front of, that bone.

The second case, double congenital talipes equino-varus, showed the muscles and tendons in their normal relations. The tibialis posticus and the tendo Achilles were very tense. The peronei were behind the external malleolus. When the tendons were all cut, the deformity persisted. The bones were deformed in much the same manner as in the first case. The reduction of the equinus was completed upon cutting the posterior ligament of the ankle joint. The calcaneo-cuboid and scaphoid ligaments offered considerable resistance to the reduction of the varus.

Measurements of the angle of inclination inwards of the neck of the astragalus, according to the plan of Parker and Shattock, in these and other cases, were made and the conclusions were:

(1) The obliquity of the neck of the astragalus is greatest in cases of varus, less in normal, and least in adult feet.

(2) A change in the obliquity of the neck of the astragalus is a part of the development of that bone, whether it be in a normal or varus foot.

(3) In all probability, this obliquity of the neck of the astragulus offers greater resistance to the reduction of the deformity in cases of congenital varus or equino-varus past the first few years of life than has hitherto been supposed.

Prince[2] describes an apparatus for the treatment of equino-varus. It consists of a sole-plate, or the sole of the shoe, with an

[1] *Boston Med. and Surg. Jour.*, Oct. 27, 1887.

[2] *St. Louis Medical and Surgical Journal*, May, 1888.

iron plate turned up on either side just back of the toe, and perforated for a joint. From here, attached by a rivet, passes a metallic strap, on each side, parallel with the sole, to a point about opposite the malleolus, thence upwards at right angle with the first portion and parallel with the leg, and at the top the two straps are connected by a metallic band across the front of the leg. A leather strap passes across the instep, connecting the two right angles; and another leather strap passes from the top around the back of the leg, drawing the upper end of the lever backward and thus forcing the heel downwards. The apparatus has an advantage over a similar apparatus shown by Shaffer at the Orthopædic Section of the N. Y. Academy of Medicine a short time since, inasmuch as the band passing in *front* of the leg at the upper part gives a longer and consequently more powerful lever.

Dr. George R. Fowler[1] makes an urgent plea for commencing the treatment of club-foot of congenital origin immediately after the birth of the child. The feet, in the vast majority of cases of congenital talipes, are in such a pliable condition at birth that restoration to the normal shape can be accomplished with comparatively little difficulty, and there retained by the exercise of but very slight force. The treatment advised in such cases, is as follows: a strip of rubber adhesive plaster an inch wide is passed across the dorsum of the foot, just back of the toes, from without inward, then around and across the sole from within outwards in front of the medio-tarsal joint, and thence up the fibular side of the leg, and the whole covered with a flannel roller. In some cases this is covered with plaster-of-Paris. Where it is necessary to do tenotomy of the tendo Achillis, it should not be united *after* the anterior deformity has been corrected.

Dr. A. M. Phelps[2] gave a demonstration of the operation of open incision in the management of certain forms of talipes equino-varus before the Surgical Section of the N. Y. Academy of Medicine (Nov. 14, 1887), and gave statistics of 61 operations upon 36 feet. Of these 33 were his own cases. In no case had death occurred as a result of the operation. Relapse was liable to occur, as after all other operations, and hence the great necessity for continuous care until the tendency had been completely overcome. If the bones were not deformed, primary osteotomy was not justifiable, and no one could tell the amount of bone-deformity present until the open operation had been made.

In the discussion[3] which followed, Dr. C. T. Poore referred to the obliquity of the neck of the astragalus and Parker and Shattock's measurements of the same. He also referred to his paper in the *N. Y. Medical Journal*, January 15, 1887, on "The Treatment of Inveterate Talipes Equino-Varus by Osteotomy," and thought there was a question whether as free an incision as had been advocated was necessary, or whether a subcutaneous section of the shortened tissue would not be all that was required.

Dr. L. H. Sayre favored the open operation rather than the more formidable one of tarsotomy.

Dr. N. M. Shaffer was of the opinion that neither open incision nor osteotomy was required to effect a cure. He divided club-foot into three varieties: (1) muscular, (2) ligamentous, and (3) bony. It was very difficult to differentiate between them.

Dr. A. B. Judson said he preferred to take the strongest possible grounds against the operative treatment of club-foot.

At the meeting of the N. Y. Surgical Society,[4] Jan. 11, 1888, Dr. H. B. Sands presented two patients: the first showing the results of excision of a wedge-shaped piece from the tarsus in congenital club-foot; and the second, excision of the astragalus, with portions of the os calcis, cuboid and external malleolus in congenital club-foot. The results were satisfactory in both cases. He thought that there was considerable difference of opinion regarding the comparative merits of orthopædic treatment and the bloody operations in the management of club-foot, which was due to the fact that orthopædic surgeons usually dealt with cases at an early stage of the deformity. There was some danger that surgeons might go to the extreme in operating upon young children who might be benefited by the simple use of apparatus.

Dr. C. N. Dixon Jones[5] says: "The results of the ordinary methods of treating

[1] *Brooklyn Medical Journal*, May, 1888.
[2] *Medical Record*, N. Y., Nov. 26, 1887.
[3] *Medical Record*, Jan. 14, 1888.
[4] *New York Medical Journal*, Feb. 11, 1888.
[5] *Medical News*, Jan. 21, 1888.

club-foot are so disappointing and unsatisfactory, that any operative procedure which holds out the probability of removing or overcoming the difficulties encountered by the surgeon should be hailed with delight." He then goes on to advise the open operation of Dr. A. M. Phelps, and to describe the same.

Mr. Swan[1] advocates, in patients past the age of ten years, ablation of the anterior three fourths of the cuboid bone, all the external cuneiform except its posterior part, the proximal extremities of the third, fourth, and fifth metatarsal bones; and the apex of the wedge should consist of a portion of the middle cuneiform bones. He has performed the operation in thirty-four cases since 1876.

Mr. Walsham[2] advocates the immediate restoration of the parts to their normal position after tenotomy, and gives the following advantages: (1) great saving of time, and (2) the doing away with the necessity of expensive extension apparatus. The disadvantages which I have found attending the rapid, but which do not apply to the immediate, are: (1) that considerable pain is often caused by the force which has to be employed in stretching the uniting material, and (2) that in severe cases the reparative material cannot always be stretched sufficiently to overcome the deformity, and it is occasionally necessary to redivide the tendon.

The same author also reports[3] a case of traumatic aneurism of the internal plantar artery following the division of the plantar fascia for talipes equino-varus, which he successfully treated by pressure.

JOHN RIDLON, M.D.

THERAPEUTICS.

Petresco on the Styptic Action of Bryonia Alba. — Unlike the Bryonia dioïca, this drug when given to animals produces such a contraction of the capillaries that the circulation is finally stopped. It has been tried in various sorts of hemorrhage (including post-partum) with very good results. The ordinary dose is 5, 6, or 7 drachms of the dry root in 10 ounces of water. The active ingredient of the drug seems to reside in a glucocide. This produces decided results in 3-grain doses in rabbits, and in 1½-grain doses in frogs. —*La France Méd.*, Aug. 18, 1888.

Radcliffe (A.) on Agaricine.—The patient had been a victim of hip-disease, and last fall her lung-trouble commenced to develop. She was much emaciated; pulse, 110 to 120; temp., 101° to 103°. In the superior lobes of both lungs were râles and tubular breathing; a cavity was forming in the left superior lobe. In the sputa I found bacilli. The family had been giving sage tea, which for a time stopped the sweating; but it was now profuse every night, and some during the day. I had reasons for not giving belladonna. The formula of Joung I reduced and changed to suit my convenience.

℞ Agaricini, .12 grammes (1⅞ gr.).
Pulv. doveri, .1 gramme (1½ gr.).
Pulv. gummi arab., q. s.
F. pil. xxxv., divide.
S.—One just before retiring.

The pills were made not larger than fine shot; no one could object to taking so small a pill. She commenced taking them the last of January, and at my request they were stopped several times for one or two nights. The first night they were omitted there would be no sweating, or very slight; but if omitted the second night there was always some sweating. It seemed that the effect of one dose lasted two nights, but was about gone by the third. When taken every night there was no sweating, no laxative effect, nothing that we noticed but its antidiaphoretic action. She had to take a laxative once or twice a week. The first of April she was out of doors in an invalid-chair, and that night had a sweat. As she needed more pills, I increased the agaricine in the above formula to .15 grammes (2¼ gr.). Since then there have been no sweats, and only one pill taken at night.

In two other cases of night-sweats, one of which had taken all the domestic remedies and some others, two or three of the agaricine pills, taken one at night, stopped the sweats.

An impure alcoholic extract, sold under the name of agaricine, is given in doses of 1 grain to 1½ grains, or even larger; if this is any thing like the agaricine I have been using, the dose appears altogether too large, as mine has not exceeded .006 gramme (about ⅒ gr.).—*Therap. Gaz.*, June 15, 1888.

Roosevelt (J. W.) on the Cobalto-Nitrite of Potassium.—Dr. Wolcott

[1] *British Medical Journal*, Feb. 11, 1888.
[2] *London Lancet*, May 19, 1888.
[3] *London Lancet*, Jan. 28, 1888.

Gibbs suggested to the author that cobalto-nitrite of potassium might be of value in certain cases, on the ground that its stability and relative insolubility would probably cause a slower, more uniform, and more easily controlled action than that of nitro-glycerine, sodium nitrite, amyl nitrite, or ethyl nitrite. He further stated that the salt could easily be prepared in a state of absolute purity, and would have the advantage of not being deliquescent or subject to chemical change.

Given to animals it does not seem to be very toxic, and in doses from 2-5 grains it produces a rapid pulse with lowered tension and drowsiness. The dose usually given to patients was half a grain every two to four hours. It was given in a few cases in half-grain doses as often as every hour. The cases chosen were those in which the other nitrites are often found to be of value. Three cases of uræmia with high arterial tension and dyspnœa, with or without signs of œdema of the lungs, were selected. In two an attempt was made to compare the action of nitro-glycerine and the new salt administered alternately in the same case. The tension, as shown by the sphygmograph or finger, fell in from fifteen minutes to an hour. The dyspnœa was wonderfully relieved in two of the cases, and the effect was more lasting than that of nitro-glycerine.

A case of emphysema was also relieved. In a case of valvular disease no relief followed. The effects of the drug begin in fifteen minutes to one hour and last for three or four hours.—*N. Y. Med. Jour.*, Aug. 25, 1888.

Skvortsoff on the Effect of Iron on the Vital Processes.—The author concludes: 1. Iron does not affect to any appreciable extent the nitrogenous metabolism in the healthy subject. 2. The internal use of iron in quantities greater than gr. ½ or gr. ½ per diem (in the dog which formed the subject of the experiment) decreased the assimilation of the nitrogenous parts of food, but only to a small extent; thus before the iron the nitrogen assimilated was 98.4 per cent., during the administration of iron the nitrogen was only assimilated to the extent of 97 per cent. 3. The assimilation of the nitrogen of the food was somewhat increased after the abstraction of blood, whether iron was given or not. 4. If, after the bloodletting, iron was given with the food, the hæmoglobin increased more rapidly than if iron was not given. After the first venesection, when no iron was given, the hæmoglobin did not attain its normal quantity for fifteen days. After the second, which was by far the more copious abstraction of blood of the two, the administration of iron brought the hæmoglobin up to its previous percentage in five days, while in ten days it had exceeded its previous percentage. It should be stated that the percentage of hæmoglobin immediately after the two bleedings was found to be the same. 5. The weight of the body after the bleeding increased more rapidly under iron than without it. After the first bleeding without iron, the rise in weight on the seventh day was 2⅝ ounces. After the second bleeding, iron being given, the rise in the same time was six ounces. After the third bleeding, which was performed as a control experiment, the rate of increase of hæmoglobin, no iron being given, was similar to that observed after the first bleeding.—From the *Vrach* in *Lancet*, Aug. 18, 1888.

Hills (W. B.) on the Value of Corrosive Sublimate as a Practical Disinfectant.—The importance of the disinfection of excreta, etc., cannot be over-estimated. It is conceded that such material must be disinfected before it is thrown into the vault or similar receptacle, because of the impracticability of disinfecting large masses of matter. A disinfectant, to be effective, must have penetrating power sufficient to bring it into intimate contact with every portion of the material to be disinfected. Corrosive sublimate does not have this power, owing to the property of coagulating albumen. It should, therefore, be replaced, if possible, by some agent to which this objection cannot be made. We have such an agent in chloride of lime. It has the power of penetration; it oxidizes and destroys organic matter; and it is, in addition, an efficient germicide, bearing in mind the fact that it must be used in such quantity that it shall be in sufficient excess after the reaction between it and the organic material is complete.

Corrosive sublimate, in a word, though a very efficient disinfectant, as measured by its power to destroy germs, is limited in its applications. It can be used for the disinfection of furniture and other articles made of wood or porcelain, or even metal, if varnished, the floors and walls of rooms, such parts of ships as can be reached with

solutions, the hands and the surface of the body, and clothing and bed-linen, if not soiled with discharges; in other words, for the disinfection of surfaces which are not themselves injured by contact with it, or surfaces which do not contain material of such a character as to destroy its efficiency. Its use for these purposes is, however, very much restricted, because we have no means of disposing of it, except through lead pipes.—*Boston Med. and Surg. Jour.*, Aug. 23, 1888.

Otis (E. O.) on Creoline and Photoxyline.—Creoline comes from the aromatic class of hydro-carbons, is not poisonous, and combines the favorable workings of iodoform with those of corrosive sublimate. Esmarch found that its anti-parasitic quality was greater than that of carbolic acid, but its disinfecting quality less. Kortüm has used it with advantage in surgical cases, and also in puerperal fever. He says it cleans up wounds, diminishes suppuration, and induces a speedy cure. Neudörfer, of Vienna, uses creoline only as an antiseptic, and has found one-half to two-per-cent. solution efficient, using two-per-cent. solution for instruments and preparing the skin at the seat of operation. He says it relieves pain, checks hemorrhage, and limits suppuration. He prepares a fresh solution each day by adding two drops of creoline to six ounces of water.

He uses it undiluted for erysipelas. It has also been used in a one-half-per cent. solution to wash out the bladder, and besides being a deodorizer and hæmostatic, is said to improve the condition of the mucous membrane. I should think it might be of service as an injection for gonorrhœa, although I have never tried it. I have found it very serviceable for all the cases in which one uses an antiseptic, and especially for poultices, so that I have almost entirely discarded the ordinary flaxseed poultice. I wring out a wad of absorbent cotton in a solution of it, applying it to the suppurating wound, cover it with dry cotton, and apply a bandage. I give the patient a small bottle of the creoline, tell him to add two drops to a cup of warm water, and with this solution make a poultice in the way I have described. Pure, it is a black-looking fluid of much consistence, and with water makes a milky solution with a tarry odor. I use two solutions, one half and two per cent. The price is about the same as that of carbolic acid.

Photoxyline, called to my attention by Dr. Louis, I use as Von Wahl directed, a five-per-cent. solution in equal parts of ether and alcohol. It looks like collodion, but its advantages over it are said to be (*a*) its persistent, firm adhesiveness; (*b*) its absolute imperviousness; (*c*) its uniform compression of tissues. I use it in many minor operations and injuries. It is said to be especially suitable for plastic operations upon the face and in the neighborhood of the male genitals. Over wounds closed with sutures a thin layer of absorbent cotton saturated with it is placed, and serves as an antiseptic protective. In children, where the soaking of the dressing is not to be avoided, it is of service. It is also recommended for the sutured wounds of laparotomies.—*Boston Med. and Surg. Jour.*, Aug. 9, 1888.

Drzewiecki (J.) on the Treatment of Pleurisy by Salicylate of Soda and Salol.—From the results obtained in six cases, it may be concluded that in salol we possess a more valuable agent in the treatment of pleurisy than in salicylate of sodium. Possessing all the positive qualities of salicylate of soda, it is free from unpleasant effects of the latter, viz., it very rarely produces buzzing in the ears, and even being employed for a long time does not spoil the appetite, which is a very important thing, and does not produce any feebleness of the heart, nor collapse. However, I must draw the attention to this, that in order to receive a quick effect from salol, it must be given in large doses, from eight to twelve grammes (℥ ij.–iij.) daily. Smaller doses, as half a gramme, even given often, have no such good action.—*Med. Record*, Aug. 25, 1888.

Ramsey (G. E.) on Antipyrine in the Treatment of Gastralgia.—A young man had been a victim of gastralgia some two or three years. His attacks, which came on with but little premonition, were paroxysmal, acute, and violent, recurring at short intervals of from five to ten minutes during a period of from eight to twelve hours. His more recent attacks averaged one a month, and were growing more frequent and severe, and had become alarming as to a fatal result.

On first being called to see him I gave him hypodermic injections of morphine, administered chloroform, and applied hot applications to epigastrium to control pain, which remedies I was obliged to continue

some eight hours before permanent relief came. His attacks always left him exhausted, lame, and sore for two or three days. On being called again to see him for the same trouble, in about four weeks after my first visit, I administered ten grains of antipyrine, and directed him to repeat the dose every hour or two as required to control symptoms. Three or four doses aborted the attack. The symptoms have since recurred at increasing long intervals and have been met in the same way and uniformly with the same result, and with the remedy always at hand he no longer requires help from a physician or others.—*Am. Lancet*, Aug., 1888.

Mays (T. S.) on Calcium Chloride in Glandular Affections of the Neck.[1]—I have used this agent for a number of years, both in private and public practice, and can fully indorse the strong views expressed by Dr. Coghill, especially in so far as scrofulous affections of the neck are concerned. Very often one meets with pale, rickety children, who have swollen cervical glands, poor appetite, coated tongue, constipation, and in whom there is a general indication of malassimilation. Such patients usually receive the routine treatment of cod-liver oil internally, and iodide, and perhaps cod-liver oil, externally. This succeeds sometimes, but oftener fails. Here the chloride of calcium acts admirably. It reduces the enlargement, promotes nutrition, and is generally more efficacious than any thing I have ever prescribed. Its resolvent power is equally marked in the glandular swellings of adults, although here it requires a longer time, and its action is facilitated by the simultaneous application of iodine.

This agent must not be mistaken for the chloride of lime—the ordinary disinfecting powder,—the composition of which is entirely different. By prescribing the granular calcium chloride this possible error will be avoided. The dose is from two to four grains for children, and from ten to twenty grains for adults. It can be given in milk or water, but the best vehicle for it is the syrup of sarsaparilla.—*Arch. of Pediatrics*, Aug., 1888.

Warner (F.) on a Case of Tape-Worm Treated by Repeated Doses of Male Fern, without Dieting the Patient.—C. K., male, thirty years of age, of dull, robust habit, had noticed for the preceding six months that, during each stool, which occurred once daily, there were a few short, flat worms passing. On submitting the case to me for treatment, an examination showed these to be segments of a tape-worm. After putting the patient on a very low diet for two days, I administered one drachm of the ethereal oil of male fern, followed in five hours by a brisk saline cathartic. The stools were examined, but the worm was not found. The next day the segments were found to be passing with the evacuations, as usual.

Three days afterward, I began the administration of one-and-one-half-drachm doses, three times a day (after meals), of the same remedy, and continued it for five days, when a decided cathartic action set in, which brought away the worm, which was of considerable length, but was not measured.

Three months have passed, and there has been no return of the symptom which prompted the patient to seek advice, viz., the passing of segments of a tape-worm, for this was the only thing that the patient discovered out of his accustomed health.—*Cincin. Lancet-Clinic*, Aug. 18, 1888.

[1] See MEDICAL ANALECTIC, 1886, p. 104.

PATHOLOGY.

Gangolphe (M.) on the Pathological Hybridity of Osseous Affections of Parasitic Origin.—After a critical review of the subject, the author narrates a personal observation.

The subject was a shoemaker, of thirty-seven. At the age of fifteen, he had a painful swelling of the right leg, which ended in suppuration and the separation of two sequestra. The corresponding knee became and remained ankylosed. Five years before he was seen by the author, he had a clap, a preputial chancre, and a balanoposthitis; later, mucous patches and scabs in the hair. The course of the syphilis was benign, yet his subsequent health was always bad, the least excess bringing back the disease in some form. Three years ago, he had an abscess in the fold of the right axilla. Three months ago, the right leg began to pain him, and swelled at its middle. A little later, a new sequestrum separated. A few days later, he began to have severe nocturnal pains in the back and both arms. The use of camphor liniment, externally,

and iodide of potash, internally, relieved him temporarily, but soon the pain in the right humerus unfitted him for work, and he entered the hospital. Traces of the old osteitis of the right tibia remained. The right humerus was the seat of pain, and was tender on pressure. It was swollen in its middle, and the skin covering it was red, tense, and a little hot. There was no fluctuation, nor were the joints implicated.

M. Tripier diagnosed old infectious osteo-myelitis of the right tibia and gummatous osteo-myelitis of the right humerus. Energetic specific treatment with the iodides proved the correctness of the diagnosis.—*Lyon Méd.*, July 29, 1888.

Christian (E. P.) on Vaso-Renal Changes as a Factor in Causation of Still-Births.—In concluding his paper the author states:

That only a small portion of the subjects of albuminuria during pregnancy become the subjects of eclampsia.

That eclampsia may appear in those in whose urine albumen has not been detected, and who have presented none of the usual general symptoms leading to a suspicion of its existence, which cases are probably of a reflex character, and that therefore some other element or condition is necessary for the production of convulsions besides the condition of albuminuria; and which, until we are better informed as to what it consists in, we may call an irritable or explosive condition of the nervous system.

That the subjects of albuminuria are very liable to premature labors, and also to still-births, and that in those cases the fœtus may preset, in commencing or advanced decomposition, evidences of a post-mortem retention in utero for some time; that this ante-partum death of fœtus probably depends upon a state of toxæmia in the mother, but even, in some cases, upon secondary changes in the placenta and interference with the fœtal circulation, and that the parturient may incur additional sufferings and dangers from the death and decomposition of the fœtus.

That the apoplectiform variety may occur in either an albuminuric or non-albuminuric parturient, the typical case being a stout, healthy-looking, full-blooded woman, in whom, during labor, especially in the second stage, with the powerful muscular efforts of the patient, the face becomes purple, and the veins of the head and neck turgid, and distended to a degree apparently ready to burst, and in whom it is apparent that the brain is equally turgid with blood, and quite conceivable that these distended vessels may in some spot have yielded, and occasioned more or less of an effusion; or perhaps only a distention to rupture of some of the fibres of the vessels, preventing a ready contraction, and in whom, therefore, more or less of a congestive state may remain for some time. In my experience these cases have usually had the convulsions after completion of the labor, and perhaps we may find in this explanation the reason also for this delayed outbreak. These are the cases in which free venesection has an almost uniformly speedy and favorable effect.

On the other hand, in the typical-appearing albuminuric, with pale and pasty complexion, with anasarcous ankles and tumefied tissues under the eyes, etc., we have none of these appearances of active cerebral congestion. And yet, as Marshall Hall has shown us how similar may be the symptoms arising from cerebral congestion, and from excessive losses of blood, is it not possible to find in both these classes, the florid and robust-looking, and the anæmic and unhealthy-looking, so very different conditions leading by different ways to similar final results? In the one, the pressure of an active congestion or effusion of healthy, red blood; in the other, a similar pressure from an effusion of its watery part, as exhibited in the cellular tissue of the legs, the face, and even in the abdominal cavity.—*Annals of Gynecology*, July, 1888.

Morel-Lavallée (A.) on Extra-Genital Chancres.—Last year M. Nivet, in a Paris thesis, [1] tabulated 595 cases of extra-genital chancres. The author, at the request of M. Fournier, now reports similar cases occurring during the past twelve months in 45 patients. These patients presented 48 extra-genital chancres distributed as follows: Upon the head, 30; on the trunk, 12; on the limbs, 4; on the neck, 2.

The cephalic chancres had the following distribution: Upper lip, 9; lower lip, 7; chin, 6; point of tongue. 2; eye, 2; cheek, 2; nose, 2; tonsil, 1.

Of the chancres of the trunk there were: Of the breast, 8; anus, 2; abdomen, 2.

On the external region of the thigh there

[1] See MEDICAL ANALECTIC, 1888, p. 82.

was 1; on the hands and fingers, 3; on the neck, 1.

The author, with Fournier, wishes to emphasize the fact of the great frequency of syphilis acquired in other ways than by sexual intercourse, and also to point out the peculiar dangers attending syphilis so acquired. Syphilis, innocently contracted, is becoming so frequent that it will be necessary to modify our ideas about it as, in many instances, it ceases to become an offence, or its bearer at all culpable or deserving of contempt.—*Ann. de Dermat. et de Syph.*, June, 1888.

A Novel View of the Nature of Cancer.—Dr. C. Fortes of Munich declares from his microscopical examinations that true carcinomata are neither epithelial nor connective-tissue tumors, but depend upon the introduction and multiplication of parasites, especially vesicular. He avers that they most resemble echinococcus multilocularis, and gives drawings which obvionsly show that he takes the alveolar structure to consist of an aggregation of cysts! The reason why these cancer-parasites have been hitherto overlooked is because their walls and their contents are so delicate and transparent as to be indistinguishable from the surrounding tissue. He further declares the "epithelial" cells to be the products or germs of the "cancer capsules." Such views have at least the merit of novelty, if of nothing else.—*Lancet*, Aug. 4, 1888.

Ranvier and Rietsch on Experimental Tetanus.—By inoculations with the dust from oats, the authors were enabled to produce, in an ass, true equine tetanus. In the same way they produced the same disease in guinea-pigs, and from animals so infected they could propagate the disease from one to another. They find: that healthy rabbits inoculated by material from the blood and sciatic nerves of animals so dying remain healthy; that rabbits inoculated with parts of the liver and brain have septicæmia simply, with no tetanic symptoms; that four rabbits inoculated with the pus and tissues bordering on the resulting abscesses develop tetanus in thirty-six hours, which proves fatal on the fifth to seventh day.—*L'Union Médical*, Aug. 18, 1888.

Chantemesse and Widal on the Persistence of the Germ of Tuberculosis in River Water.—They made researches to ascertain how long the spores of tuberculosis would live in Seine water. Some samples of water had been, some time previously, sterilized, and the cultures containing many tubercular spores were placed in them; others received the cultures directly without previous sterilization. Half the tubes of each section were kept at a temperature of 46.4° to 53.6° F.: the other half were kept at the temperature of the room, 59° to 68° F. Every eight days water was taken from the tubes kept at a cold temperature, and those at a moderate one, and were then placed in Pasteur's vials containing glycerized broth, according to Nocard and Roux's method. Pasteur's vials were then placed in the heating stove. At the end of twenty days and one month, one cubic centimetre of each of the tubes which, without previous sterilization, had received germs of tuberculosis was inoculated into the peritoneum of guinea-pigs. The results were as follows: The germ of tuberculosis was preserved for fifty days in sterilized Seine or river water, kept between 46.4° and 53.6° F. It was preserved for seventy days in river water previously sterilized, and kept at a temperature of from 59° to 68° F.

Besides the question of the vitality of the tubercular germs, is the no less important problem of their virulence. The guinea-pigs inoculated with one cubic centimetre of water, which contained for fifteen days germs of tuberculosis, were sacrificed after two and a half months. Not one presented any trace of tuberculosis. This result was due to the feeble dose of inoculated germs, or to the attenuation of these germs in a more or less cold water, or to both of these causes.

M. Arloing, of Lyons, in connection with the facts presented by MM. Chantemesse and Widal, desired to call attention to experiments made by MM. Galtier and Cadéac, in regard to the resistance of the bacilli in contact with river water. These experiments had been made under two conditions. Tubercular fragments were placed in running water; fifteen days later the fragments were very virulent. In running water the virulence was maintained for one and a half months; in stagnant water, an inoculation made on the 120th day gave positive results, while one made on the 123d day was negative.—*Med. News*, Aug. 25, 1888.

De Brun, of Beyrut, on the Antagonism between Malarial Fever and

Tuberculosis.—The author said that he was struck on his first arrival in Syria with the fact that phthisis was much more rare there than in France. It could not be due to any advantages in the climate of the country, for the incessant rains of winter, the continued heat and moisture of the atmosphere in summer, and the depressing winds from the desert, all contributed to favor the spread of tuberculosis. The only explanation of the fact, therefore, that was at all satisfactory was furnished by the law of Boudin, who maintains that there exists an antagonism between malaria and tuberculosis. Tuberculosis was absolutely unknown in former times when there was no attention paid to sanitation, but its advent coincided in time with the introduction of drainage, and other works designed to prevent malaria. Just in proportion as these works were successful and as malaria diminished, phthisis increased. Often, indeed, in malaria there is pulmonary congestion, and this, taken in connection with the debility and lowered general vitality of those affected, not infrequently leads to a diagnosis of phthisis, but the effect of quinine in dispelling all these symptoms discloses quickly their true character.—*Med. Record*, Aug. 25, 1888.

Netter on the Streptococcus Pyogenes in Normal Saliva.—The author has found this organism in 5.51 per cent., that of Friedlander in 3.93 per cent., and the pneumococcus of Fraenkel in 50 per cent. of normal subjects.

He explains the production of infectious tonsillitis, often followed by septicæmia or pyæmia, by supposing that these streptococci enter the blood after traversing the tonsils. In the same way he explains the cases of otitis where streptococci are found. The similarity between the streptococcus of pyæmia and erysipelas is interesting in view of the apparent pharyngeal origin of the disease and its habitual recurrences.—*Gaz. hebd. des Sci. méd. de Montpel.*, Aug. 7, 1888.

Foxwell on a Case of Syphilis Modifying Phthisis.—When 17 years old the patient suffered from an attack of inflammation of the lungs, which confined him to bed for nine weeks, but from which he completely recovered. The physical signs now were almost confined to the base of the right lung. Though he had had expectoration with his cough for two and a half years, and had been exposed to great hardship, yet the physical signs were decidedly those of early phthisis, and his general bodily condition was good. This Dr. Foxwell considered to be due in great measure to his being the subject of congenital syphilis, as he believed syphilis strongly militated against rapid destruction of lung tissue. Bacilli were present in moderate numbers.—*Br. Med. Jour.*, June 16, 1888.

Cornevin on Gangrene Foudroyante and its Preventive Inoculation.—The author has sought to modify the virus of this disease by passing it through the organisms of various animals. He finds that when inoculated in the white rat the virus loses some of its malignancy, and is not toxic in all instances in rabbits and pigeons, while it never kills ducks, cats, and dogs.

He concludes that the virus is a septic vibrio which is mitigated by the combined action of heat and various chemicals, as the phenols, and that this modified virus grants an immunity against the strong, but only for a short time, *i. e.*, 24 hours. Lactic acid makes the weak virus strong.

The septic vibrio is very abundant in cultivated ground, very rare if not absent in the soil of woods, and is not found in the air.

Applied to healthy surfaces it is harmless, although deadly when introduced hypodermically.—*Gaz. hebd. des Sci. méd. de Montpel.*, Aug. 4, 1888.

SURGERY.

Reclus on Condition of the Testicle after Obliteration of the Tunica Vaginalis.—Gosselin has said that spermatogenesis is impossible after this operation, and in spite of the protests of Julliard, Fleury, and others it is generally so conceded.

Reclus has dissected, at the Bicêtre, 300 testicles, and has found 24 adherent; of these, in 12 the adhesions were almost total, and of them only 4 contained no spermatozoa. In the 12 others the adhesions were complete, and of these only 3 were infertile. These specimens were taken from 71 subjects whose ages ranged from 21 to 84 years.

Gosselin's law hence seems erroneous.

Reclus attributes the cessation of spermatogenesis to the epididymitis, which occasionally results from the inflammation

incident to the closure of the tunica vaginalis.—*Le Praticien*, Aug. 13, 1888.

Bennett (E. H.) on Separation of the Coracoid Epiphysis of the Scapula.—In no written record can I find any mention of the coracoid process being detached after the manner of epiphysary separations.

A male, aged six, was admitted, July 15, 1887, in a state of profound shock, pulseless but sensible. He had been knocked down by a tramcar, and was taken up from beneath its guard-board. A large flap of skin, from about the mammary line in front to within an inch of the clavicle above was torn up from his chest wall on the right side; a second rent of the skin extended backwards beneath the axilla from the point of the anterior wound; the axilla was torn open and the upper limb all but torn off; the axillary vessels were seen torn through, and most of the nerves. The right forearm was broken, and many of the ribs on the right side were broken. His condition precluded operation for some 48 hours, when gangrene of the whole limb had occurred. Amputation at the shoulder was then performed by my colleague, Dr. Ball, the only difficulty being the finding of sufficient covering for the stump. In face of all these difficulties the child did well until tetanus set in, and proved fatal on July 23d.

At the autopsy the right ribs were found broken, from the second to the seventh completely, while the eighth and ninth were incompletely fractured. There was no injury of the lung or pleura. The coracoid process was found to be broken.

From the character of the wound, particularly that of the skin, it is clear the force which inflicted the injury of the axilla was directed from below and in front, upwards and backwards, and its action ceased a little below the clavicle, which was intact. The lesion of the coracoid confirms this view. It was detached at its base, the line of separation passing through the proximal side of the cartilage, and at the upper and back part taking off a scale of bone from the supra-spinous fossa of the scapula.—*Dublin Jour. of Med. Sci.*, Aug. 1, 1888.

Lloyd (J.) on a Peculiar Fracture of the Olecranon.—A man fell from a bicycle on his left elbow. He was treated by different surgeons in various ways for ten months, when he came under the care of the author, with the arm in the following condition. The left elbow was almost fixed at a right angle; the hand could be moved only a few inches in passive flexion or extension. Supination and pronation were nearly perfect. All the muscles of the limb were wasted. The most easily recognized "landmark" was the cup-shaped head of the radius, which lay immediately under the skin at the outer side of the back of the joint. The olecranon was clearly displaced backwards, but its normal outlines could not be satisfactorily mapped out. At the inner side of the front of the joint the lower edge of the rounded articular end of the humerus could be discerned, and an abnormal fulness continuous with this edge suggested ossific deposit about a misplaced and badly united fractured condyle. The skin over the inner side was reddened, thinned, and closely adherent to the underlying bone. All other measures failing, excision of the joint was performed, the condyles of the humerus and the upper extremities of the radius and ulna being removed.

The chief pathological interest of the case lies in an examination of the excised piece of ulna, which was removed entire and without preliminary snipping off of the olecranon. A fracture runs transversely across the superior surface of the olecranon, nearly an inch from its extreme tip, corresponding closely to the anterior edge of the insertion of the triceps tendon. The fracture extends obliquely downwards and forwards, and ends in the great sigmoid notch at its deepest part, the articular surface being thereby divided into two nearly equal halves. Another fracture appears to have passed from a point half an inch nearer the olecranon tip to join the first fracture at about its centre, separating a small triangular piece from the posterior angle of the whole fragment. The shape of the entire fragment on section is triangular; its apex formed by the tip of the olecranon, its base by the broken edge, its front border by the upper half of the sigmoid notch, and its hinder or upper border by the top of the process. This wedge-shaped fragment has been driven downwards and forwards into the notch, so as to narrow it to a mere cleft, reducing its longitudinal diameter from three fourths to one fourth of an inch. The fractured surface of the fragment overlaps the articular cartilage, which has been undisturbed for nearly half an inch. The fragment is firm-

ly united in this position. Whether it was impacted or not could not be determined. The end of the radius was normal, and was in proper connection with the ulna. The excised end of the humerus was formed by its lower articular surface and parts of both condyles.

The case establishes beyond doubt not only the possibility of incomplete fracture of the olecranon, but also that sub-fracture may be driven forward into the sigmoid notch, dislocating the humerus and making its reduction extremely difficult if not altogether impossible.—*Lancet*, May 5, 1888.

Biggs (H. M.) on the Accidents Incidental to the Use of the Exploring Needle in Diagnosis.—In closing an article on the above subject the author says:

"I especially desire not to seem to exaggerate the dangers following the use of the exploring needle or to overestimate their importance. The following remarks, however, are suggested and seem to be justified by the cases reported:

"1. The employment of the exploring needle is not infrequently attended by considerable danger, and a number of deaths have directly resulted from its use.

"2. The indiscriminate, careless, and routine resort to exploration with a needle should be condemned. This procedure should not be resorted to without careful consideration of the conditions obtaining in each case and the results that may follow the puncture. The site for the puncture should be thoughtfully chosen, the puncture carefully made with complete antiseptic precautions, and the smallest needle that will answer the purpose employed.

"3. The puncture of collections of fluids with tense walls in relation with serous surfaces should be, as far as possible, avoided, and, if it is resorted to, sufficient fluid should be withdrawn to relieve the tension upon the walls of the sac. In many cases certainly an exploratory operation would be attended by less danger.

"4. In the introduction of the needle into deeply seated infectious matter the nature of the intervening tissue should be carefully considered.

"5. The needle before use should be always thoroughly disinfected, preferably by heating in the flame of an alcohol lamp or a Bunsen burner.

"6. The skin where the puncture is to be made should be rendered thoroughly aseptic by first scrubbing with soap and water and then washing with an antiseptic solution.

"7. The dangers attending the use of this valuable adjuvant in diagnosis should not in the slightest interfere with its employment in properly selected cases, where due precautions are observed as to its use."—*N. Y. Med. Jour.*, Aug. 18, 1888.

Lagnaite on an Epithelioma Developing on the Cicatrix of a Burn Received Fifty Years Before.—The patient, a woman of 54, at the age of 4 had received a burn on the back of the thigh, which left a scar reaching from the great trochanter, the popliteal fold.

On this scar an epithelioma developed. A fleshy mass appeared which steadily grew without causing glandular enlargements, which caused it to be looked upon as of benign nature. On removing the tumor some difficulty was experienced in closing the wound and an auto-plastic operation had to be resorted to.—*Lyon méd.*, Aug. 12, 1888.

MISCELLANEOUS.

Simpson, I. T., on Arrested Development of the Abdominal Walls. In August, 1887, I was called to see a child which had been born the night before my first seeing it. The mother was a primipara and had been attended by a midwife. On examining the child I found a circular aperture in the anterior abdominal wall, situated about midmay between the pubes and ensiform cartilage. The opening was about three inches in diameter, and was covered by a thin membrane of yellowish-green color into the lower portion of which the cord (a small and slender one) was inserted. The margin of the aperture was well defined, and had a rounded appearance, as though the skin were turned in under itself. Whenever the child cried the membrane was forced out by the intestines and became quite tense; in fact, I was alarmed at first for fear it might rupture. In other respects the child was a fine healthy boy. The cord fell off in the usual manner, and the skin gradually grew over the membrane, from the circumference towards the centre, until the whole was covered in. After this skinning over had taken place the whole pre-

sented a puckered appearance, the skin being arranged in folds radiating from the point of insertion of the cord. The abrupt margin of the circle can still be distinctly made out on manipulation, and of course the abdominal wall is weak at this part, and requires to be supported by a belt having a pad sufficiently large to overlap the margins of the aperture. The child has grown rapidly since birth, and is now well and strong.

The treatment adopted was simply to place a piece of oiled lint over the membrane, and on this a pad made out of a large cork bung, covered with wash-leather, and of sufficient size to overlap the margins of the opening. This was fixed by a few strips of adhesive plaster and a bandage applied. Later on, when the skin had grown over the membrane, an ordinary umbilical bandage with a large pad was worn, and is still worn. I did not form any opinion as to the nature of the membrane at the time, but it was possibly the expanded tissues of the cord.—*Lancet*, Aug. 18, 1888.

The Neuroses of Heart Disease.—The nervous symptoms accompanying cases of heart disease are often numerous, and their combination is frequently curious, and not always easily explained on physiological principles. Sometimes the physician finds a large heart with valvular disease, and simply faintness as the only troublesome symptom, and this but an occasional one. Physicians have not seldom been called upon to treat distressing nausea, sometimes with diarrhœa and without any signs pointing to an altered state of the mucous membranes; the heart cannot be said to have failed in its compensation; the tongue may be normally clean; the stools present nothing abnormal, except that they sink in water and are too loose, time not having been allowed for the natural changes incidental to residence in the large bowel. We all know the troublesome, often barking, cough not necessarily associated with congestion of the lungs secondary to the valvular deficiency. No doubt many of the symptoms are to be explained on the view of inequality, if not inadequacy, of the circulation through the abdominal and thoracic viscera, or through the brain and spinal cord; but it seems that we must recognize pure neuroses not so caused, and a careful study of the patient's previous and family history will bring out the neuropathic tendency as well as the rheumatic relationship. Sometimes, in fact, the nervous symptoms are not so much the effect of the heart disease as of a pre-existing neurotic susceptibility which may have actually developed—for example, in chorea—before the rheumatism had involved the valves of the heart. Those who advocate the nervous origin of rheumatism would perceive nothing antagonistic to their belief in this mode of viewing the subject.—*Lancet*, Aug. 11, 1888.

Taylor (C. B.) on Resection of the Optic Nerve for Ablation of the Eyeball.—Notwithstanding the great advantages obtained by the substitution of enucleation for the ancient and formidable practice of scooping out the whole contents of the orbit, it is clearly impossible to accept this operation as a final solution of the difficult problem of how to deal with a lost eye. The operation of exenteration, the substitution of a glass vitreous chamber, and the late Mr. Streatfield's proposal to destroy the whole conjunctival surface in certain cases after enucleation, is evidence that modern surgeons are not satisfied with the existing state of things. Atrophy of the orbit and neighboring tissue frequently follows enucleation; the glass eye excites traumatic conjunctivitis, and if the artificial substitute is withheld the orbit retracts. To a workingman the annual expense is onerous, the glass eye a perpetual annoyance, and an empty orbit a constant receptacle of foreign bodies. Nevertheless, when the eye is crushed, contains a foreign body, or neoplastic growth, or belongs to a patient who cannot be trusted to take care of himself, or to return if threatened with sympathetic ophthalmia, it is best to remove it. If, however, although sightless, the eye is a good-looking organ, and only affected with neuralgia or recurrent inflammation, or belongs to a patient who refuses enucleation, it is best to excise a portion of the optic nerve, which is quite as effectual as enucleation, and has the great advantage that it does not sacrifice the eyeball or render an artificial eye necessary.

In thirty-one cases the author has obtained the most gratifying results from this operation Motion in all directions is perfect, and, in fact, in some of them it is difficult to tell which eye has been done.—*Br. Med. Jour.*, July 28, 1888.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of

CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital; CONDICT W. CUTLER, M.D., Instructor in Diseases of the Skin, Post-Graduate Medical School, New York; JOHN D. HAWLEY, M.D., Attending Gynæcologist, New York Hospital, Out-Patient Department; FREDERICK PETERSON, M.D., Lecturer on Nervous Diseases at the New York Polyclinic.

VOL. V., NO. 37. September 13, 1888. WHOLE NO. 85.

CONTENTS.

PAGE

Leading Article 437

Occasional Report on Orthopædic Surgery, 442

Medicine 447

LEADING ARTICLE.

On the Treatment of Aneurism.—Dr. R. N. Taylor[1] reports three cases of aneurism treated with Iodide of potash. One a sacculated aneurism of the left subclavian artery situated on its first and middle portions. The patient was put upon Iodide of potash, fifteen grains three times a day, the dose after a week being increased to twenty grains. This treatment was continued for some months, during which time there was a steady improvement and final disappearance of the symptoms, and the tumor became reduced in size, a previous thrill and pulsation disappeared, and a bruit which had at first been heard was no longer audible. For six months following the iodide was continued in reduced doses. Fifty-two months from the beginning of the treatment there were no signs of a return. The other two cases were of aneurismal dilatation of the artery, one being of the right common carotid involving the artery in its whole extent, and the other involving the upper part and the bifurcation of the same; in both iodide of potash, fifteen grains three times in the day, was prescribed, resulting in relief of the symptoms, principally pain at the seat of the lesion. Treatment was continued in one case three months, in the other six months, to be resumed on return of the symptoms. There was no diminution in the size of the arteries.

Dr. R. L. Macdonnell[2] gives six cases treated with iodide of potash, one a large aneurism involving the arch and descending aorta and producing well marked symptoms. The patient was put upon ten-grain doses, ordinary diet, and rest in bed. The treatment was continued for six months, when improvement was so marked that the patient returned home. Treatment was kept up, and two years after its commencement improvement still continued. Case II. was under treatment six months, taking ten-grain doses of iodide of potash, and resulting in so much improvement that the patient returned to his home and passed from further observation. Case III. was a well marked thoracic aneurism treated by ten-grain doses of iodide of potash three times a day. Treatment was continued four months, when the patient left the hospital and obtained work as a night watchman, afterwards as a groom; he returned a year afterwards, having continued treatment almost uninterruptedly, free from his previous symptoms, and a year after this reported himself as well and able to do hard work. Case IV. was treated with iodide and rest, and steady improvement followed and he was still alive at the end of a year. Case V. was one in which improvement followed from the use of ten-grain doses, rest, and good diet, but was not long enough under observation to test the treatment. Case VI. was believed to be an innominate aneurism. Iodide of potash, ten grains three times a day, and rest was the treatment. He was under treatment nine months when he was able to leave the hospital and gain his living as night watchman for seven months, medication during this time being continued. When Case VII. came under

[1] *Am. Pract. and News*, April 14, 1888.

[2] *Medical News*, vol. lii., No 1.

observation there was orthopnœa and severe pain in chest. There was a large innominate aneurism; ten-grain doses of iodide of potash three times a day and rest was the treatment. At the end of a fortnight all urgent symptoms had disappeared and the patient was enabled to return to his duties—those of a military clerk,—suffering no pain. Further history of the case is wanting.

Dr. Israel T. Dana[1] reports a case of aneurism of the abdominal aorta treated with rest, moderate diet, and twenty-grain doses of iodide of potash three times a day. Improvement soon began and was steady for nine months, two of which were spent in bed; he had gained twenty-four pounds in weight and was able to do light work.

Dr. C. W. Suckling (*British Med. Journal*, April 30, 1887) reports twenty cases of aneurism and speaking of treatment says: "Tufnell's plan of treatment together with the administration of iodide of potassium gave relief in twelve cases. In two cases under this treatment the dulness almost disappeared, the pressure symptoms completely so, and the diagnosis of the condition could not have been made without a knowledge of the previous condition. The iodide was given in large doses, commencing with ten grains and increasing to a dose of a drachm or more according to the tolerance and effects. In two or three cases the iodide seemed to do harm, the pulse becoming very quick. Aconite in these cases suited better."

Dr. M. H. Fussell[2] reports a case of thoracic aneurism treated with potassium iodide, fifteen grains three times a day, the patient, a carpenter, continuing at work. At the end of a week the principal symptom pain, was relieved; at the end of two months patient reported that he was well. He reported again a little over a year afterwards, and stated that he had been well until six months previously, when after a hard day's work his symptoms became exaggerated, and at the time he was seen there was marked dyspnœa, and he had been unable to work for two months. Iodide in twenty-grain doses with moderate rest resulted in marked relief of the symptoms. Dr. Fussell says: "The action of the iodide in relieving pain leaves nothing to be desired in that direction."

Dr. Geo. W. Balfour,[3] on the failure and success of the iodide treatment and criticising Dr. Suckling's results (*vide supra*), writes:

"Had Dr. Suckling been fully cognizant of all the facts bearing on the treatment of aneurism by iodide of potassium, he would have known that this quickening of the pulse is due to an overdose, and is one of the things to be guarded against. With your permission I shall restate these facts concisely, for the instruction of those whose treatment fails through ignorance, and the information of those others who, even in the present day, continue to practise the unscientific and hazardous plan of filling the sac with iron wire, apparently unaware that we now have a perfectly reliable method of treating aneurisms, the success of which is entirely commensurate with the earliness of our diagnosis and our acquaintance with the principles on which the treatment is based.

"As recumbency reduces the heart's pulsations from six to more beats per minute, it is always advantageous and often necessary to begin the treatment of aneurism by putting the patient to bed. The patient's pulse must then be counted daily at the same time for several days, so as to ascertain his normal pulse-rate when recumbent. Next we prescribe the iodide, in ten-grain doses every eight hours. The pulse-rate is noted for several days subsequently; if it remains unaffected, the dose of the iodide is increased to fifteen grains every eight hours; and should the pulse-rate still remain unaltered, the dose may be still further increased. It is unusual, however, for more than fifteen grains to be given with advantage, and it is more usual to find it impossible to give more than ten grains every eight hours without raising the pulse-rate. The proper dose, once ascertained, must be steadily continued till the desired effect is secured. Marked improvement is generally observed in three months; sometimes in less. If the case is got early enough, the cure is practically complete; but even when treatment is delayed till the aneurism has attained a large size, the relief is usually remarkable, and it is obtained without risk.

"The action of the iodide is to dilate the arterioles and thus lower the blood-pressure over the whole body, the force of the

[1] *Boston Med. and Surg. Journal*, vol. cxvi., No. 24.
[2] *Medical and Surgical Reporter*, Sept. 10, 1887.
[3] *British Med. Journal*, June 4, 1887.

heart being at the same time slightly diminished. The result of this lowering of the blood-tension is that the aneurism is no longer actively dilated with each pulsation, and the walls of the sac behave like a hollow muscle opposed to an obstacle with which it can successfully cope, and become slowly hypertrophied, the sac itself at the same time gradually diminishing in size. That the walls of the sac may hypertrophy, it is of importance that the blood-tension should not be too much lowered; and for this reason the pulse-rate requires to be closely watched at the commencement of the treatment, as a rise in the pulse-rate is the only available indication of an injurious lowering of the blood-tension. As the iodides not only lower the blood-pressure, but also remove the albuminates from the blood, there is no need to starve the patient. If we do so, we unduly lower the blood-pressure, impoverish the blood, and render a curative hypertrophy of the walls of the sac more or less impossible. The superadding of 'Tufnell's plan' to the treatment by iodide of potassium is, therefore, no improvement, but the reverse; and though just at first we must be a little careful in dieting our patient, because recumbency and repletion are liable to induce gastric attacks, yet it is needful to feed the patient well during the iodide treatment; otherwise good results are not so surely obtained. It is always necessary for an aneurismal patient to be a total abstainer from all alcoholic drinks, both during treatment and ever after."

Dr. O. T. Schultz[1] reports a case of aneurism of the first part of the aorta treated with five-grain doses of iodide of potash four times a day. Improvement was so marked that the patient considered himself well, and was able to do heavy laboring work, and had stopped medication. At the end of five months the aneurism ruptured, and autopsy showed considerable reparative work in the tumor.

Dr. W. H. Morrison (*Polyclinic*, August, 1887) reports a case of aneurism involving the innominate and right common carotid, operated on by Dr. Ashhursh. The right common carotid, just above the omohyoid muscle, and the subclavian in its third part, just outside the anterior scalenus muscle, were ligated with catgut. No cerebral symptoms followed the ligation of the carotid. Three months and a half after the operation the tumor was quite hard. No pulsation was detected, and the patient complained of no symptoms whatever.

Dr. Herman Mynter[2] reports a similar case, an aneurism of the innominate artery, which was cured by simultaneous ligation of the common carotid in the middle, and the subclavian in its third division, outside the scalenus anticus muscle. Heavy catgut was used for ligatures, and strict antisepsis preserved. The wounds were sutured with catgut, and healed by first intention. Three weeks after the patient was discharged cured.

Dr. George H. Lyman[3] reports a case of innominate aneurism treated with iodide of potash, ten grains three times a day, the dose being increased slowly from fifteen to forty grains, for a period of fourteen months; rest, limited diet, and pressure were also used. There was steady improvement during this time, and it being thought that medical means had done as much as possible, the common carotid was ligated, under the omohyoid muscle. Improvement was only temporary, and sixty days after the subclavian artery was ligated. The patient left the hospital six months after, and continued well for two months, when symptoms again appeared, and he died five months after leaving the hospital.

Mr. William Anderson[4] reports a case of popliteal aneurism successfully treated by compression for an hour, after which two needles were passed into the tumor, and a current from sixteen cells of a battery passed through them for five minutes; the needles were packed in antiseptic wool, and the pressure maintained for twenty-four hours, when it was discontinued and the needles withdrawn. The patient had an inguinal aneurism on the other leg, which was treated by ligation of the external iliac artery about an inch and a half above Poupart's ligament; pulsation in the sac returned on getting up. The patient pursued his work, that of a train conductor, for eighteen months, when he died of an aortic aneurism; the autopsy showed the inguinal aneurismal sac filled with a coagulum partly soft, reddish, and friable, and partly pale, firm, and laminated, and that the sac contained a small cavity, into which the

[1] *Medical News*, Feb. 11, 1888.
[2] *Medical Record*, Oct. 15, 1887.
[3] *Boston Med. and Surg. Journal*, April 28, 1887.
[4] *Lancet*, Aug. 27, 1887.

superficial femoral, profunda, internal circumflex, and a large muscular branch opened. The popliteal sac presented nothing special.

Dr. T. G. Richardson[1] at a meeting of the American Surgical Association in 1887, reported a case of a popliteal aneurism cured by position. The tumor, an aneurism of the femoral artery, was about the size of a goose-egg, irregularly flattened, and appeared to be inflamed by manipulation. To overcome this Dr. Richardson suspended the limb flexed at right angles at the hip and knee. He found on the first day an improvement in the condition of the tumor, and a few days later, that coagulation had occurred. A few weeks later he was discharged cured, and a few months after only a small nodule could be felt at the site of the tumor.

As this is probably the first case of femoral aneurism cured by this method, he desired to call attention to the fact that no pressure was exerted on the tumor, but that the only treatment was flexion, and suspension of the limb, especially the latter. He thought that gravity had a great deal to do with effecting the cure.

Dr. W. W. Keen[2] reports two cases of aneurism in girls eighteen and eight years of age. The first case was an arteriovenous aneurism of the ulnar, which had been ineffectually treated by Esmarch's bandage, tourniquet, and digital compression successively; ligation of the artery and a mass of veins at the site of the aneurism resulted in complete cure. The second case was a spontaneous aneurism of the interosseous artery of the hand, which, in the course of seven or eight years, disappeared spontaneously.

Mr. Percival[3] reports a case of innominate aneurism, treated by twenty-grain doses of iodide of potash three times a day, and rest for two months, at the end of which time no improvement having taken place, the subclavian and common carotid arteries were simultaneously ligated, the operation resulting in an arrest of the disease. Four months after the operation the patient resumed active duties, and three months after this she wished to return to hard work.

Dr. Knox[4] reports a cure of a ruptured popliteal aneurism by first ligating the femoral artery above the upper margin of Hunter's canal, and then cutting down upon the sac, turning out the clots, and ligating above and below the sac.

Drs. Knox[4] and Beatson,[4] in the same journal, report the cure of a double popliteal aneurism: one by intermittent pressure extending over seven days, and amounting in all to twenty-five hours; the other by ligation in Scarpa's triangle.

Dr. F. W. Murray[5] reports a case of aneurism of the internal pudic artery, successfully cured by cutting down upon the sac, which had ruptured, and ligating the artery. The patient died five months afterwards, when the autopsy confirmed the diagnosis and cure of the aneurism.

Dr. R. S. Smith[6] reports a case of aortic aneurism, treated first with iodide of potassium, in combination with rest and a limited diet, which appeared to arrest the course of the disease. The symptoms abated, and the patient considered herself well enough to leave the hospital ward and go to her own home after nine months' treatment.

On being re-admitted three months after, the symptoms were again relieved; and she was discharged, fairly well, in a little over three months.

Nine months later, galvanic treatment was commenced, first with one needle introduced into the sac; then, a week later, with two needles, insulated except at the ends; five weeks later, two needles; and after another interval of four weeks, two needles for the third time. It was thought that more active treatment would do more than alleviate symptoms; accordingly four needles were introduced to a depth of three inches. A current from 30 cells was maintained for half an hour. A month after, there had been very marked and steady improvement, and three months after she was discharged, and continued fairly well for nine months, when she died of an attack of general bronchitis. Autopsy showed a layer of old firm fibrin an inch and a half thick, occupying the anterior portion of the sac, and adherent to the wall.

In No. 2 of the *Riv. Internaz. di Med. e Chirur.*, 1884,[7] Professor Brancaccio published a case of aneurism of the ascending aorta cured by electrolysis. The patient was

[1] *Med. and Surg. Reporter*, July 9, 1887.
[2] *Medical News*, Dec. 24, 1887.
[3] *Brit. Med. Jour.*, June 2, 1888.
[4] *Glasgow Med. Jour.*, May, 1888.
[5] *New York Med. Jour.*, April 7, 1888.
[6] *Brit. Med.-Chir. Jour.*, Dec., 1886.
[7] *London Med. Record.*, April 15, 1887.

in the hospital for a month, and after four applications was discharged able to return to work. Three years after, in 1886, he was again admitted with double pneumonia, which proved fatal after five days. Post-mortem showed the presence of a clot in the sac which rendered it impossible to push the finger into the aneurismal cavity. In the same journal are notes of a case treated by galvano-puncture resulting in diminution in the size, and abatement of symptoms, followed in a month by a gradual return of the tumor.

Dr. W. H. White and Mr. A. P. Gould [1] report a case of sacculated aorta aneurism treated by the introduction of thirty-two feet of steel wire into the sac. Death resulted at the end of eight days. At the necropsy the first part of the arch of the aorta was found dilated to the size of a large orange, and springing from the upper part of this dilatation was a sacculated aneurism the size of a cocoa-nut. The intra-thoracic portion of the tumor had a distinct but thin sac, but that part which protruded from the chest was destitute of a definable sac, and was limited by infiltrated muscle. The wire, together with loose fibrinous clot, formed a very dense mass, nearly filling, but not adherent to, the sac. The authors suggested that the fatal result was largely due to the absence of a distinct sac to the outer part of the aneurism, and to the effects of the formation of a very hard solid mass in the aneurism, combined with rather firm external pressure applied for the arrest of the serous oozing. They submitted the following conclusions, namely, that (1) Moore's treatment was worthy of further careful trial in properly chosen cases; (2) the operation should be performed before there was reason to suspect rupture of the sac; (3) only a small quantity of wire should be introduced at any one time; (4) no firm pressure should be made over the aneurism afterwards.

Mr. J. W. Hulke mentioned a similar case that had been under the treatment of Dr. Cowley and himself. The aneurism involved the right subclavian; thirty-three feet of steel wire were passed into the sac; the patient died at the end of three weeks; autopsy showed a slight clot about the wire.

At a meeting of the Surgical Society of Paris, M. Bucquoy [2] related a case of femoral aneurism treated by the introduction of a watch-spring into the sac. The spring went in without difficulty, but, instead of curling up, it went through the opposite wall; being slightly withdrawn, a portion was cut off, leaving about an inch and a half in the sac. During the following days the pain diminished, and the tumor became much firmer. Two months afterward the patient, having fallen into a cachectic state, died. When the tumor was opened the spring was found broken and covered with fibrin, but the clots were of recent formation. However, M. Bucquoy thought that, on the whole, the patient was benefited by the treatment, and that it might be repeated in a similar case.

Dr. John F. Morse [3] reports a case of cure of an abdominal aneurism by Loretta's method. Laparotomy was performed, and an exploring needle, one millimetre in calibre was thrust into the sac, when a stream of arterial blood spurted through it. One yard and a half of one-half millimetre silver-plated copper wire was carefully passed through the needle into the aneurism, and the needle withdrawn. The slight hemorrhage resulting was readily stopped by touching the small opening with pure carbolic acid, rendered fluid by the addition of a little glycerine. After the usual toilet of the abdomen, the abdominal wound was united by means of five deep and four superficial stitches. An antiseptic dressing of carbolized gauze was applied.

Eleven weeks after the patient was discharged cured; the tumor reduced one half its size at the time of operation; consists of a hard nodule; no bruit.

In the *Lancet*, April 16, 1887, is the report of a case of abdominal aneurism treated by Dr. J. J. Pringle by laparotomy and the introduction of steel wire into the sac. Only about a foot of wire was introduced before an insurmountable kink stopped its further progress. The patient died seven days later of asthenia. The aneurism was found to arise from the aorta at the level of the cœliac axis, and to be saccular, and filled with clot, more than one third of which was laminated, and presumably due to the procedure adopted.

Dr. W. E. Stevenson [4] recommends the

[1] *British Medical Journal*, April 16, 1887.
[2] *Notes and Comments*, July 7, 1888.
[3] *Pacific Medical and Surg. Journal*, Feb., 1887.
[4] *Lancet*, June 11, 1887.

passage of a wire into the sac, and connecting the end of it with the positive pole of a strong galvanic battery, the negative pole being on an indifferent point, the circuit closed, and a current of from fifteen to twenty milliampères passed for thirty minutes. WALTER VOUGHT, M.D.

OCCASIONAL REPORT ON ORTHOPÆDIC SURGERY.

BY JOHN RIDLON, M.D.

Roth (B.) on the Treatment of Flat-Foot.—The author gives the following classification: (1) cases in which it is possible to restore the foot completely to the normal shape by passive manipulation, without any force exerted by the surgeon, or by making the patient stand with the heels raised; (2) cases where the tarsal bones have become more or less fixed in their displaced positions by shortened ligaments and tendons, osseous deformity of the articulating surfaces, and fibrous or osseous anchylosis, which require forcible manipulation under anæsthetics to restore more or less of a normal arch; (3) intermediate cases, in which a partial restoration of the tarsal arch is possible without "brisement forcé."

In the way of treatment he advises in the second class of cases "brisement forcé" by H. O. Thomas' club-foot wrench under anæsthetics, and when the effects of traumatism have subsided, and also in the first and third class, the use of H. O. Thomas' shoe, which is an ordinary shoe built up on the inner border of the heel and inner border of the sole at the ball, from one fourth to one half inch, so that the weight of the body as transmitted through the tibia will fall nearer the outer border of the foot than normal. For strengthening the tibial muscles it is advised to walk on the toes with the heels raised, and to perform the following forty times: The patient sitting on the floor or couch, with the back supported and knees extended, circumducts the foot down, in, up, and out, while the toes are directed inward the whole time; and the following twenty times: The surgeon fixes the leg above the ankle with one hand while the palm of the other exerts a gradually yielding resistance to the patient's effort to adduct and invert the foot. On completion of the adduction the patient strives to maintain this position of the foot while gradually yielding to the pressure of the surgeon's hand, gently pushing the foot back to the commencing position.—*Med. Rec.*, March 17, 1888.

Baker (M.) Reports Two Cases of Fracture of the Spine.—The first case lived seven months and nine days. The post-mortem examination showed fracture of the articular processes of the seventh cervical and first dorsal vertebræ, and the cervical vertebræ displaced forwards. The spinal cord had been crushed within the dura mater opposite the seat of fracture. In the second case, the fracture was at the twelfth dorsal and first lumbar vertebræ, and there was evident displacement. The patient was anæstheticised, and traction and counter-traction made. The bones were seen to go back into position. Crepitus was felt. Traction was maintained by five-lb. weight attached to each foot, and the foot of the bed elevated. A modified plaster-of-Paris jacket was used for a time, and then replaced by a poroplastic one. In a little less than three months he left the hospital. He had control over his rectum, but still used a catheter; could walk easily and without pain. There was some pain over seat of fracture, and the last dorsal vertebra was slightly more prominent than natural.—*London Lancet*, Aug. 6, 1887.

Parker (R.) on Comfortable Artificial Legs.—The patient is supported on a padded ring, as in Thomas' knee splint, and the lightly constricting bands about the thigh, which often cause intolerable discomfort and great wasting of the soft parts, are dispensed with. Joseph Critchly, 88 Upper Pitt Street, Liverpool, England, publishes a cut of the leg advised.—*Brit. Med. Jour.*, March 31, 1888.

Harrison (D.) on the Treatment of Fracture-Dislocations of the Spine by a New Splint and Antiseptic Drainage of the Bladder.—Since March, 1884, the author has treated seven cases by antiseptic drainage begun at an early stage. Two of these recovered; one is under treatment, and improving; three were discharged unrelieved. Of these, one regained power over his lower extremities, but again became paraplegic through secondary changes taking place in the cord. The seventh case died at the end of five months from ascending myelitis. The

operation on the bladder was that which Sir H. Thompson calls central cystotomy: a lithotomy tube was inserted, to the end of which was fixed a length of india-rubber tubing sufficient to convey the discharges of the bladder into a vessel by the side of the bed, and the bladder was washed out with antiseptic solutions twice daily.

The splint is so arranged that the part of the patient above the fracture rests upon one hammock, while the part below the fracture down to the hips rests upon another; these can be varied so as to make pressure tending to reduce the displacement. The legs rest upon double inclined planes with hinges and foot-pieces.—*Liv. Med. Chir. Jour.*, July, 1887.

Alexander (W.) on Some Points in the Pathology and Treatment of Caries of the Vertebræ.—My cases seem to show that the original cause, as far as we can see it, of most cases of caries of the vertebræ is either *traumatic* or *pyæmic*. With the rich the minor degree of inflammation produced by an injury is subdued at once. With the poor this trifling injury is gradually aggravated by irritation, till it takes on a new departure, and becomes of the character known under the titles of pyæmia, struma, scrofula, tubercle, the grand character of all these being that they are capable of self-propagation, and can affect the system at various and distant points. The cure of caries of the vertebræ takes place in several ways:

1st. By true anchylosis. This kind of union is that most desired by surgeons, and especially by writers on the disease. However, except it occur in the very early stages of the disease, I think we have been wrong in wishing for it. To procure it with great deformity is a mistake, and in these deformed cases the consequent interference with the functions of organs that lie both in the chest and in the abdomen, gradually brings about the extinction of life, at or before adolescence. It is very difficult during life to say whether true anchylosis has taken place or not, and many cases that seem to be cured, and practically were cured, have displayed lesions at the post-mortem that surprised the pathologist.

A safe and useful cure of caries of the vertebræ can only take place in the straight position or with a curvature so small as not to interfere materially with the position and functions of the internal organs of the body. The first place where I think anchylosis occurs in any case of vertebral caries is between the approximated pedicles and between the opposing surfaces of the articular processes that are pressed more together than in health.

When the spine is supported by a plaster jacket from the earliest stage, the approximation of the pedicles and laminæ take place with the greatest facility, and gradually a posterior and lateral splint is formed to compensate for the removal of the anterior splint naturally formed by the bodies of the vertebræ. This posterior and lateral splint supports the body (aided by the jacket) until the disease exhausts itself. Then the anterior splint is formed.—*Liv. Med.-Chir. Jour.*, July, 1887.

Cooper (H. P.) on the Early Diagnosis of Spinal Caries with Remarks on Treatment.—Attention is called to tender points about the seat of disease as shown by pressure. In children this tenderness is rarely present; but it has been the rule in the cases of Pott's disease I have seen *in adults*. In adults there is also much oftener than in children a history of *violent* traumatism.

In the way of treatment the plaster-of-Paris jacket, with or without the jury-mast, is advised. In suspending adults preparatory to putting on the plaster jacket, great care should be taken not to draw them up too high. By producing too much extension of the spine we do an injury to the diseased spot, and also incur the risk of breaking up any solidification which may have begun. Adults not infrequently suffer considerable shock from the operation. I have known one patient, a young lady 21 years old, to faint during the suspension; another adult required three days to recover from the effects of it.—*Atlanta Med. and Surg. Jour.*, Nov., 1887.

Ridlon (J.). Notes on Two Cases of Pott's Disease, Illustrating the Difficulty of Diagnosticating between Upper Dorsal and Lower Cervical Caries in Very Young Children.—The cases are related in detail. The position of the head, thrown far back, its weight supported by the elevated shoulders; the muscular rigidity limiting forward bending, but permitting backward and, to some degree, lateral bending and rotation, and the equally contracted sterno-mastoid muscles pointing the chin directly forward, taken in connection with the absence of pain about the chest and epigastrium, the

absence of paraplegia, and of kyphos after, in the first case four, and the second eight, months without treatment, led me to locate the caries in the lower cervical vertebræ. After five months' treatment in bed with weight and pulley, the first case showed a kyphos involving first, second, and third dorsal vertebræ; and the second case after four months of similar treatment showed kyphos at second, third, and fourth dorsal vertebræ, with, in both cases, subsidence of the symptoms of cervical caries and an advent of the usual symptoms of upper dorsal disease.—*N. Y. Med. Record*, Aug. 20, 1887.

Smith (N.) on Caries of the Spine; Seventy Consecutive Cases.—After relating the cases, the author gives the following statistics:

Sex: Males, thirty-two; females, thirty-eight.

Age at which disease was first discovered:

One at birth, living at age of thirteen.

One very soon after birth.

Nineteen at or under five years of age.

Five between the age of five and ten.

Thirteen between the age of ten and twenty.

Six between the age of twenty and thirty.

Five between the age of thirty and forty.

One above forty, age forty-four.

Constitution:

Forty healthy.

Sixteen scrofulous or probably so.

Eight delicate, but not scrofulous.

One probably syphilitic.

Five not recorded or questionable.

So that out of sixty-five cases scrofula was the predisposing cause in sixteen only, leaving forty-nine occurring independently.

Results:

With the exception of two, whom I saw no more after the first interview, all were more or less benefited by the treatment.

Six have died as follows: Three from causes independent of the diseased spine (namely, two from meningitis and one from pneumonia), two from amyloid disease of liver and kidneys, and one from exhaustion from the disease; this last case was beyond hope when I first saw him, and died six days after, but the instrument relieved him from the acute pain he had been suffering. —*Provincial Med. Jour.*, July 1, Aug. 1, Sept. 1, 1887.

Terrillon on Cold Abscesses.—The cold abscess, properly so-called, is due ordinarily to a local tuberculosis. Enucleation of the sac is advised when it is possible; next to this curetting, after a free opening, and stuffing with iodoform gauze; and in some cases aspiration, washing out the cavity with carbolic solution, and then the injection of a five per cent. solution of iodoform in ether.—*Med. and Surg. Reporter*, Feb. 4, 1888.

Roberts (A. S.) on Knock-Knee and Bow-Legs, with Remarks upon Rachitis.—A brace for the application of elastic traction is described. It consists of a piece of straight tempered steel, its upper extremity terminating in a semicircular steel band to extend half way around the limb; below, and jointed to it opposite the ankle, is a steel foot-piece with heel-cup, which is secured to the foot by a strap passing over the instep, and a light leather shoe-piece laced over the foot. In bow-legs it is secured to the internal aspect of the limb and strapped to the leg at the point of greatest convexity. In knock-knee, it is applied to the external aspect of the limb, and extends well up to the thigh, and is secured at two points, just above and just below the knee-joint.—*Med. News*, Feb. 4 and Feb. 18, 1888.

Owen (E.) on Rickety Deformities of the Lower Extremity; their Treatment by Operation.—Attention is directed to the value of *redressement forcé* as a means of treating such deformities as are not likely to be found amenable to the gentler method. It is also urged that when osteotomy has to be performed upon a tibia or femur, a simple key-hole saw be used as safer than the osteotome and mallet.—*Practitioner*, April, 1888.

Bradford (E. H.) on the Treatment of Lateral Curvature. — Advises the gymnastic and postural method of Bernard Roth; attention to chairs and seats, and in some cases the tilted seat; and a metal and leather support, extending down to the thighs and jointed to the corset portion by a rivet-joint. Assuming that the chief cause of lateral curvature is the superincumbent weight, it is manifest that no corset can entirely meet the indication of removal of the primal cause. Removal of the primary cause can be done in two ways, namely, recumbency and suspension. For suspension the apparatus of Lorenz is advised (Pathologie und Therapie der Seitliche Ruckgratsverkrümmungen Lorenz. Wien, 1887).

The chief objection to the use of appli-

ances is a substantial one, namely, that they can never form a definite cure, in that they can never reach the root of the matter, and simply correcting a faulty position does not prevent a recurrence of the distortion on removal of the brace. It is therefore evident that if mechanical means are to be used at all, they are simply to be used temporarily, while there is hope of the correction of the deformity or danger of increase; and that they should be subsidiary in position to measures which will enable the patient to hold himself as nearly in the proper position as possible.—*Boston Med. and Surg. Jour.*, May 3, 1888.

Scudder (C. L.), Apparatus for Recording Lateral Curvatures of the Spine.—This apparatus records:

1. The lateral curve of the spinous processes of the vertebræ.
2. The outline and height and breadth of the shoulders.
3. The outline and heighth and breadth of the hips.
4. The relations between the arms in the natural position and the outline of the hips.
5. The distance of the scapulæ from the spine.
6. The antero-posterior curves of the back.
7. The curve of rotation in the dorsal region.
8. The curve of rotation in the lumbar region.

By adjusting the pantograph to different lengths of its rods the tracing of these various curves may be reduced in size, and thus made convenient for records.—*Boston Med. and Surg. Jour.*, May 19, 1888.

Gibney (V. P.) on Diseases of the Knee and Elbow.—My plea this evening shall be for absolute immobilization of a diseased joint. I find that surgeons generally are somewhat afraid to advocate this doctrine, however strong their faith may be. It is not fully settled in the minds of surgeons whether anchylosis is the result of immobilization or the result of inflammation. For my own part, I am willing to affirm, without fear of successful contradiction, that anchylosis depends not upon immobilization, however prolonged, but upon the character and the activity of the inflammation, and upon our failure to secure this object in our therapeutics. Rely, therefore, for relief, both from abscess and from deformity, upon fixation of and protection to the joint. Thomas' knee-splint is advised for the knee; and the same surgeon's sling for the elbow.—*N. Y. Med. Jour.*, March 17, 1888.

Jones (R.), Discussion on the Routine Treatment of Excision of the Joints.—Introducing the subject, Mr. Jones said that it was necessary to protest against a recent revival of excision in early joint disease, and agreed that the resort to early operative measures was proof that the correct principles of treatment were not understood. He stated that it was of immense importance to detect early disease, and to treat in such a manner that if it became serious no change of principle would be of use. There should be no difference in the theory of treatment in the case of a knuckle to that in the case of the hip. Suitable mechanical appliances should be fixed, so as to secure the utmost rest without compressing the diseased areas. Mr. Thomas' appliances best secured these ends. Mr. Robert Jones took as a sample the case of a knee which was supposed to be inflamed. Having secured it in a splint, he considered the effusion. If sensitive, he recommended an ice-bag so slung as to give rise to no appreciable weight. He aspirated if, in a spontaneous collection, no diminution occurred in ten days. In the case of hemorrhage, he advocated early aspiration, to be repeated when necessary. If effusion, no matter what its character should give rise to, acute pain, or fever, aspirations should be insisted on. Two points were to be regarded in aspiration. (1) Not to operate until the knee was fixed in splint. (2) Not to use too fine a bored needle, lest prodding should be encouraged when the surgeon failed to get pus. It was not uncommon for him to aspirate once a week in certain cases for lengthened periods. If pus were thick or cheesy, or if constitutional symptoms arose, incision should be discussed. Personally he did not employ Listerism, as the lengthened time abscess took to heal only convinced him of the value of the simplest dressings. He thought drainage of more importance, and to see to the opening being in the most dependent spot. He strongly condemned transfixing the joint with drainage tubes. Incision should at once follow and check the ramification of abscess cavity. It was often necessary to wait long and patiently for improvement, and not to be deterred by retrogressive tendencies on the part of

the joint. The vast majority got well if waiting were sufficiently long. Some recovered maimed, and a large proportion of even the worst cases finally attained movable joints. With the disappearance of pain and fever, let them don a walking splint so constructed as to allow progression and disallow articular motion. Country air worked wonders on their constitutions. He had many such patients with discharging sinuses living in country places, who did not need to be seen for months at a time. The joint should be imprisoned long after the appearance of disease has gone. The knowledge whereby a joint can be affirmed recovered was very necessary, and was only in very vague terms referred to in text-books, and that not correctly. It was as necessary to detect recovery as to detect disease, and the want of this knowledge accounted for the frequent relapses. Mr. Thomas' theory of the test of recovery was the most reliable, and was founded on the means of detecting early disease. The law might be roughly laid down that a joint was cured of disease when the range of movement did not diminish by use. Mr. Jones then dealt at length on the details of this method, and its practical applications. He further alluded to those cases which sometimes ran an erratic course, mainly in patients over sixteen. He urged that they were rare, and that the joints seemed too well to account for the symptoms on any but septicæmic grounds, and gave reasons for deprecating their excision. One great cause of the frequent resort to excision was founded on the want of a practical acquaintance with the principles of rest. The term differed in meaning almost every time used; its quality should be stated. Its quantitative estimation is also necessary to its definition. Another cause of failure was due to inattention to the mechanical details of splintage. In Liverpool and elsewhere very few really understood the proper application of the posterior hip splint, so that its full benefits were rarely attained. A splint was no more automatic than a violin. Another fallacy was the fear of anchylosis from long confinement. Mr. Jones removed a hip splint before the meeting, from a boy who had been confined four years in it, and who, up to that moment, had not had his splint removed. Motion in the hip was, in spite of this, quite good. "Passive motions" he also condemned as utterly alien to the principles of rest. The extension of joints was even worse. The main clinical argument against the school was the frequency with which they advocated operation. Extension had been proved to induce disease in the strong and resisting tissues of healthy joints; how, therefore, could articulation soddened by disease be benefited? An inflamed capsule could not be improved by stretching. In the case of the hip in the early stages, extension could only induce pressure upon the lower and inner aspect of the acetabulum, and adjoining surface of femur. Muscular control was easier and safer attained by extension. The speaker accounted for the relief of pain which at times attended excision. He considered the advice tendered by Mr. Wright, of Manchester, to excise as soon as abscess was detected, as extremely retrogressive. If followed, it would relegate to mutilation and deformity a large number of curable cases. The little baby, for instance, exhibited that evening with perfect motion at the hip, would be destined, had his advice been followed, to limp for life. So would fifteen or sixteen of the other cases. The operator could claim no advantage over him who relied on rest in its full sense. The former did not cure but obliterated joints, whereas the latter cured a number which became totally free from defect, others were partially defective, and his worse case compared favorably with the operator's best. Howard Marsh and Mitchell Banks had pointed out the infrequency of operation among the well-to-do, and Mr. Jones argued that endeavor should be made to place on equal footing hospital patients. When cases were shown to advocates of excision which had recovered in spite of the worst disease, they argued still in favor of operation, because of time saved. They could not deny superiority of result to those who could afford to wait, but resorted to operation as an expedient of hurry. The same argument would relegate a one-legged artisan to a wooden stump instead of an expensive artificial limb, and did not argue against treatment by rest, but against his good fortune. In the case of children there could be no excuse for this argument. Mr. Jones then argued at length to prove that the time was very trivial unless almost healthy joints were excised, although the treatment of those who practised rest was deficient in many elements which he, Mr. Jones,

thought essential to the correct appreciation of the term. He added that the improved market value of a man properly cured would outweigh the defect of length of time. To this should also be added the direct mortality from operation and the frequent flail sequelæ. Some surgeons excised because of the pathological conditions they diagnosed. They seem unaware that recoveries could take place where rupture of capsule, abscess of joint, synovial thickening, and ulceration of cartilage had taken place. The cases shown that evening with numerous sinuses and movable joints should reassure them. The fear of diathesis, more especially the tubercular, alarmed others. Either the term was much too frequently applied, or the disease was curable. He referred to the discussion on tubercular peritonitis held at the Clinical Society on October 28th. He maintained that all surgeons of experience would be able to refer to old cases of strumous or tubercular disease where patients had recovered unassisted by art, and had appeared at hospital for the rectification of deformities. Some of the cured cases exhibited that evening betrayed typical strumous characters. He would not include under the term excision those cases of incision into hip for the removal of necrosed bone, or loose bone; such operations on surgical grounds were urgent. After summing up in favor of saving joints in preference to excising them, Mr. Jones urged that it was more important to reclaim those tissues encroached upon by disease than to advocate their sacrifice. — *Provincial Med. Jour.*, May 1, 1888.

MEDICINE.

Barr (J.) on the Necessity for Regulating the Amount of Fluid Ingested in Cases of Cardiac Failure. —Some time ago I had a patient who suffered occasionally from irritation of the urinary passages, with excessive excretions at times of uric acid, and at others of earthy phosphates. It was a case where the use of mineral waters might seem to have been indicated, but, as he had a feeble circulation, I cautioned him, before his visits in two successive years to two celebrated mineral-water resorts, to be satisfied with the pure air and healthful exercise to be obtained in those elevated regions, without trying their supposed marvellous springs. On both occasions he was induced to consult a leading physician in each place, who understood all about the wonderful virtues of the waters, with the inevitable result that the waters were freely prescribed. On each occasion the patient returned much worse than when he left, and was afterwards quickly cured by a quinine tonic, and increased oxidation by healthful exercise in a place where there was no mineral spring.

I have, at present, under my care in the Northern Hospital, a patient who was admitted some weeks ago suffering from great mitral constriction, free tricuspid, regurgitation with evidence of commencing stenosis, great enlargement and hardness of the liver from chronic congestion, large ascitic effusion, general venous turgescence, and urgent dyspnœa. On a dry diet the patient has markedly improved; there is no dyspnœa, the venous turgescence has disappeared, the ascites has lessened, and she is now able to move about the ward, and has the prospect of returning home fit for light household duties. This woman has been several times in another institution, where she was kept on a liquid diet, and as she thought that an excessively morbid interest was taken in her case, on each occasion when she considered that she was near her latter end, she fled home to save a post-mortem examination.

Every drop of liquid which is placed in the stomach, with the exception of part of that which passes away in the fæces, must pass through the right side of the heart, and all of this, except that which is exhaled by the lungs, must pass through the left side before it can be excreted. When, therefore, there is any mechanical obstruction to the passage of the blood through the heart, or, when the effective force of the heart is diminished, any increase in the amount of fluid in circulation must severely handicap the central pump. The velocity of the blood depends on the effective force of the cardiac contractions, and on the mass to be moved, and is inversely as the sectional areas. It therefore follows that when you have got a weak heart and a great amount of blood in the vessels, the circulation becomes very languid, and in a given time comparatively little is presented to the excretory organs. By the use of

cardiac tonics to improve the force of the heart's beat, and by reducing the supply of fluid, thus lessening the bulk of blood, we lessen the static condition, and increase the velocity of the circulation. The potential is converted into kinetic energy, there is a more rapid interchange of fluids between the blood and tissues, the hydration of the tissues is lessened, while the oxygen-carrying power of the blood and the oxidation of effete products are augmented, the congestion of all the internal organs is diminished, and their functional activity heightened.

When there is any marked cardiac failure, the quantity of fluid consumed should be restricted to the smallest possible amount, and, in a large number of cases, one pint of liquid, including the fluid portion of the food, will be found sufficient, while if there be any dropsy, the quantity may, in many cases, be reduced still further.—*Provinc. Med. Jour.*, Aug. 1, 1888.

Williams (E. T.) on the Postural Treatment of Constipation.[1]—I feel sure I cannot be mistaken after twenty years' practice, and, I may say, almost daily study of the subject, in thinking that a faulty posture at stool and consequent inertia of the abdominal muscles have been among the commonest causes of the disease in the patients under my care. A gentleman, having finished his breakfast and lighted his cigar, retires, with the morning paper in his hand, to a cosy and well-heated apartment, takes a comfortable seat, and between reading and smoking passively awaits the tardy operation of nature. He either takes no active part at all, or at most inflates his lungs a little and holds his breath, thereby depressing the diaphragm, but having no marked action on the other expulsive muscles—the straight and oblique abdominal, the *psoæ* and *quadrati lumborum*. As a result the bowels are imperfectly emptied, a residual mass is left behind in the colon, which, accumulating day by day, must finally be evacuated by artificial means.

Put the same man into the woods, and at the call of nature he seeks the nearest thicket, and there assumes a strictly physiological attitude. He neither sits nor stands, he squats. Every muscle of the back and abdomen is brought into play, the bowel is rapidly and completely emptied; and, vacation ended, he returns to his home a new man.

Watch any of the lower animals, the dog, the cat, the pig, the ape at the menagerie, even the horse and cow when hard bound—always an approach to the same attitude. I suppose every one has noticed the same thing in young children.

I believe I need offer no apology for these observations.

We ought, then, to expect, what I have found to be the case, that the assumption of a correct posture at stool would prove a sufficient cure for what may be called passive constipation. The sitting posture should be interdicted, and a stooping one substituted. If the construction of the water-closet does not admit this it should be altered. The margins of the basin should be leaded, and wide enough to afford room for the feet on each side. Above this on hinges should be two covers, the lower one perforated, the upper not. One of the best arrangements, for men at any rate, would be to abolish the seat altogether, and have merely a stone or marble slab, with a hole in it, as is often seen in Europe, at or near the level of the floor.

For ladies the matter is less easily managed. I have often recommended the use of the chamber utensil instead of the ordinary seat. One lady of most distinguised family and position assured me that this was one of the most valuable suggestions she had ever received. I have found it equally beneficial in other cases.

I have now been using and recommending this posture treatment for twenty years. I hardly know any person of sense who ever properly tried it who did not find it of advantage. With proper diet and exercise it will surely cure the majority of cases with comparatively little aid from medicine. Still drugs and clysters are needful at times, and in certain cases must be regularly used; though I believe the greater part of those who require continuous dosing are persons too ignorant or too indifferent to try and cure themselves by natural and simple means. The abused motto, *natura duce*, too often made a mere cloak for professional ignorance, here finds a wise and wholesome application.—*Boston Med. and Surg. Jour.*, Aug. 26, 1888.

[1] See Abbott in *Northwestern Lancet*, March 1, 1888.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of

CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital; CONDICT W. CUTLER, M.D., Instructor in Diseases of the Skin, Post-Graduate Medical School, New York; JOHN D. HAWLEY, M.D., Attending Gynæcologist, New York Hospital, Out-Patient Department; FREDERICK PETERSON, M.D., Lecturer on Nervous Diseases at the New York Polyclinic.

VOL. V., No. 38. September 20, 1888. WHOLE No. 86.

CONTENTS.

	PAGE
Occasional Report on Diseases of the Nose, Mouth, and Throat	449
Diseases of the Eye and Ear	454
Occasional Report on Diseases of Women	456
Miscellaneous	460

OCCASIONAL REPORT ON DISEASES OF THE NOSE, MOUTH, AND THROAT.

BY CHARLES H. KNIGHT, M.D.

Link (S.) on Operative Treatment of Empyema of the Antrum.—He describes two cases operated on by drilling into the maxillary sinus through the outer wall of the inferior nasal meatus. In each case pre-existing fistulæ, one into the mouth and the other on the cheek, were thus closed, the antrum being washed out through the nose, a decided advantage. It is claimed that percussion of the hard palate will show whether the antrum is empty, and whether its contents are fluid or solid.—*Brit. Med. Jour.*, May 12, 1888.

Ziem prefers opening through the alveolar process, Mickulicz's method of operating through the nose being more difficult, more painful, and more bloody.—*Jour. Laryngol. and Rhinol.*, July, 1888.

In an elaborate paper Adolph Bronner gives the notes of four cases and compares the different methods of operating.

Hartmann of Berlin and Stoerck of Vienna, advocate the method of syringing out the sinus from either of the natural foramina in the middle meatus, and, if these be not large enough, to enlarge them. We have seen that the wall separating the middle meatus from the sinus is very thin and partly composed of mucous membrane only, which in many cases of disease of the nose is often absent, thus leaving a large and free opening between the nose and the sinus. For syringing out the sinus a common Eustachian catheter or small silver bent tube can be employed. The patient feels the fluid passing into the sinus, so that one can be sure when the proper opening has been reached. The advantages of this method are—(1) it is the most natural way of syringing the cavity, as no new opening has to be made; (2) it is very simple; and (3) not at all painful. The disadvantages are—(1) the opening is high up in the sinus, and it is therefore rather difficult to drain and syringe out properly; and (2) the nostril is often very narrow, so that it is difficult to introduce an instrument. Mickulicz of Krakau proposes to open the sinus by perforating the bony wall between it and the lower meatus, just under the middle of the lower turbinated bone. He uses a special instrument for the purpose. He holds this method to be superior to the method advocated by Hartmann and Stoerck for the following reasons: (1) The opening is lower down in the sinus than the natural opening, and it is therefore easier to drain the cavity through this opening; and (2) there is not so much danger of wounding the orbit. In opening the sinus from the alveolus process, the first or second molar tooth is removed, if necessary, and a thick trocar or probe is passed through the alveolar into the sinus. The advantages of this method are: (1) The sinus is opened at its lowest part, and can therefore be drained and syringed very efficiently; (2) the field of operation can be overlooked. The disadvantages are (and these seem to me to be very great): (1) The pus, etc., pass out into the mouth, giving rise to much nausea, sickness, etc.; (2) the opening readily closes up; (3) foreign bodies, especially particles of

food, easily get into the sinus and keep up the suppuration; (4) the alveolar process is often very thick and hard to pierce; (5) there is danger of wounding the orbit; (6) a sound tooth has often to be removed; (7) a cavity is made to communicate with the mouth, which nature intends to communicate with the nose only; and (8) the operation is very painful, and an anæsthetic is generally necessary. The mode of treatment I should propose would be: (1) If pus points anywhere, open the sinus at that place; (2) in all other cases try and make use of or enlarge the normal opening in the middle meatus; (3) if this cannot be done, operate as proposed by Mickulicz. The alveolar process should, I think, be perforated only (1) in very acute and painful cases; (2) if the nostril be narrow and there be not room enough to introduce an instrument; and (3) if the first or second molar tooth be loose, and pus flows freely from the socket, etc., on its removal.

The points to which I have endeavored to draw attention, and which are illustrated by the history of these few detailed cases, are—1. That the chronic form of empyema of the maxillary sinus is much more common than is generally supposed. 2. That in many cases there are no typical symptoms whatever. 3. That empyema is very frequently the cause of chronic and recurrent rhinitis, especially unilateral. 4. That empyema can give rise to the typical symptom of ozæna. 5. That it is in most cases caused by disease of the mucous membrane of the nose, and not by diseased teeth. 6. That in most cases the easiest and simplest method of treatment is to open the sinus from the interior of the nose, and not from the alveolar process.

An interesting paper on this subject by P. McBride may be found in *The Medical Journal and Examiner*, Aug., 1888.

Burckhardt (H.) on External Incisions in Retropharyngeal Abscess.—The author advises an incision along the anterior border of the sterno-mastoid. The tissues are separated without cutting, at the level of and close to the larynx, until the thickened connective tissue around the abscess is reached. Three successful cases are given, and this method is recommended also for the removal of foreign bodies.—*Centralbl. für Chir.*, Jan. 8, 1888.

Pasteur (W.) on Abscess outside the Tonsil, in an Infant, Causing Dysphagia and Dyspnœa, Relieved by Operation in the Neck.—The region involved was the cellular tissue outside the right tonsil and the tonsil itself. The abscess was opened by an incision in front of the sterno-mastoid. Four months later a similar abscess formed which was treated in the same way.—*London Lancet*, July 14, 1888.

Grabham (Charles) on the Treatment of Tonsillitis by Salicylate of Sodium.—Large doses, 10 to 20 grains every two hours, are recommended. No gargles, except of hot milk and water, are used. One case is mentioned, in which, after failure of salicylate, bicarbonate of soda, 10 grains every hour, proved successful.—*Practitioner, Lond.* May, 1888.

Dr. de Havilland Hall recommends *cocaine* in 20 per cent. solution, brushed over the fauces, and cites cases. It is said to be more useful in parenchymatous than in follicular inflammation. After the patients are able to swallow, tincture of the perchloride of iron, with or without quinine, is ordered.—*Brit. Med. Jour.*, May 19, 1888.

Dr. F. H. Potter advises antifebrin and the local use of bicarbonate of soda in powder or solution for acute tonsillitis in children.—*Buffalo M. and S. Jour.*, May, 1888.

Allen (H.) on Gouty Sore-Throat.—The author relates five cases, in gouty subjects, which yielded only to remedies for gout. No pathognomonic group of symptoms exists, and the condition may be mistaken for the irritable throat of lithæmia.

Perhaps the best guides to a gouty condition are furnished by the permanent teeth. While not essential to a diagnosis—for in a marked instance known to the writer, the teeth do not conform to the rule, it is very generally found that the teeth are large, the antero-posterior diameters being especially exaggerated, the enamel thick and of a yellowish color. The peculiarities of gouty teeth are confined to the incisors, canines, and bicuspids.

The crowns are often marked by transverse lines, and the bases of the lingual and palatal surfaces are apt to be gibbous. The cutting edges of the crowns of the incisors are without serrations. A disposition exists for recession of the gums from the necks of the teeth.

In the local treatment of gouty sore-throat it is only necessary to remember that all agents must be soothing in character.

Operative procedures are not well borne. If they are demanded, they must follow the use of general remedies.

The constitutional treatment of gout need not be entered upon here. As is well understood, no single plan is adapted to all cases. In the main, preparations of colchicum can be relied upon to assuage the disease, careful attention being directed to the digestive and urinary functions. Most of the cases are improved by omitting meat from the dietary. Sweet wines and spirits are to be avoided.—*Med. News*, June 16, 1888.

In a paper on "The Rheumatic Element in Throat Disease," Dr. F. W. Hinkel discusses the element of lithiasis in sore-throat.—*The Med. Press of Western N. Y.*, July, 1888.

Jamison (Arthur) on Hemorrhagic Pharyngitis.—The author narrates several typical cases, but fails to tell us the source of the hemorrhage, except that it is produced by hawking rather than coughing, and the sputa are free from bacilli as well as from other elements distinctive of pulmonary disease. His theory is that it is indicative of hepatic engorgement, and occurs in place of hemorrhoidal bleeding. In a general way his treatment consists of "looking after the liver," by means of acids and bitter tonics, and when these fail, giving a blue pill at night, followed next morning by a saline aperient.—*Brit. Med. Jour.*, April 21, 1888.

Ellerman (C.) on Two Rare Growths of the Soft Palate.—Although each of these growths had the gross appearance of papilloma, one proved to be an "aberrated tonsil," and the other a "plexiform angioma." In either case the diagnosis seems to be based on rather careful microscopic examination.—*Brit. Med. Jour.*, Jan. 21, 1888.

Marsh (H.) on the Elements of Success in the Operation for Cleft Palate.—The operation should not be done too early in life. Even in the milder cases, when the cleft is limited to the soft palate, success is more certain if the child is at least two or three years old. In the average run of cases it is better not to operate until the patient is between four and five. In very young children, too, there is more danger to life.

Care must be taken to see that the patient is in good general health before the operation is performed. The temperature should be taken morning and evening for two or three days before it is proposed to operate, and if it is not absolutely normal the operation should be postponed. Care must also be used to ascertain that the child has not been exposed to any of the exanthemata, especially scarlet-fever. Should the patient have a cough, no matter how slight, or diarrhœa, the operation ought to be postponed.

After the age and health of the patient come the width and the shape of the fissure and the conformation of the bones at the roof of the mouth. The mere antero-posterior extent of the cleft is immaterial. It is quite as easy to close a fissure that involves the whole length of the hard palate, as it is to close one of similar width that involves only the posterior part. Indeed, it is sometimes easier, because the closure of the anterior part removes tension from the sutures posteriorly, where union is most likely to fail. The really important points are the width of the fissure, the shape of its anterior end, and the height or pitch of the arch of the hard palate. As to the width of the cleft, it is obvious that, other things being equal, the wider the cleft, the more difficult it will be to close it. As to the anterior end of the cleft, when this is pointed like a thin wedge the shape is favorable; but when the anterior end is rounded like the bow of a hairpin, even though the cleft farther back is not very wide, the difficulty of closure will be considerably increased. As to the height of the palate and the shape of the arch, the higher the arch and the more it approaches the perpendicular —the width of the cleft remaining the same,—the easier will the closure be: while the lower the arch the more difficult does closure become.

Tension may be relieved by taking pains to detach the flaps, especially at the junctions of the hard and soft palates, and by making lateral incisions. These incisions should run antero-posteriorly midway between the line of sutures and the alveolar border. Anteriorly they should entirely divide the soft parts, posteriorly they should extend but little if at all beyond the mucous membrane. By following this plan there will be no danger of impairing the vitality of the flaps. As to the sutures, these should be of silver for the hard palate, and of horse-hair, mainly or exclusively, for the soft; and the first to be passed should be a fairly deep silver suture,

obtaining a secure hold, at about the junction of the hard with the soft palate. Then the soft palate should be closed to the tip of the uvula; and, lastly, the hard from behind forwards. If the sutures in the hard palate are producing marked tension, they should be only loosely twisted for the moment, and should be tightened with torsion forceps only after the side cuts have been made.

For four or five days after the operation the child should be fed exclusively upon milk and beef-tea, with a little brandy added to the milk if this seems necessary. From the sixth day to the fourteenth he may have, in addition, fine bread crumbs well softened in gravy; bread sauce, made by scalding finely-grated bread crumbs in milk; potato finely minced in gravy or beef-tea; corn-flour, or ground rice puddings made with milk and eggs, or soft custard pudding. Only when the palate has healed and the sutures have been removed, should solid food be allowed. As harm may be done by asking the child to open his mouth to show how the palate is getting on, it is best to follow the plan of requesting that no one should look at the palate for the first week. Looking can obviously do no good; for even if union is failing to take place nothing can be done. The best chance always is to keep the palate at complete rest. Should the child flag, or look pale, or not take his food, he should, even on the second or third day, if the weather is warm, be sent out for a drive—if this can be done—twice a day; or he should be allowed to be up and walking about, for this will do no harm if he is carefully watched. Several times I have followed this plan with advantage. When children are evidently doing well, they may be kept in bed, where they are most easily managed, for a week, and then allowed to be up. As a rule, no local applications should be made. The sutures may be removed in ten days or a fortnight.—*Lond. Lancet*, July 7, 1888.

Two Cases of Epithelioma of the Tongue.—In both these cases the disease was extensive, and the operations required for its removal, especially in the first case, were very severe. In the one which is first recorded the operation was successful in the relief of pain and prolongation of life, but, as was expected, secondary growth appeared, and was the ultimate cause of death. The use of the knife and scissors was attended by the best result; the vessels were secured at the time, and the danger of secondary hemorrhage was diminished by the absence of after-sloughing. Iodoform was used successfully as a local antiseptic, and the strength of the patients sustained by a plentiful supply of nourishment and stimulants.

In the first case the disease involved the glands and the lower jaw, and the whole tongue, the submental tissues, and part of the body of the jaw were removed. The patient died about three months and a half after the operation, probably from suffocation due to a large cervical tumor.

In the second case the whole tongue was removed with scissors. An œsophageal feeding-tube was used until the fifteenth day. Temperature was normal after the fifth day, and on the seventeenth day the patient was discharged cured.—*Lond. Lancet*, June 23, 1888.

White (Jos. A.) on Bloodless Resection of Tongue for Epithelioma.—The operation was done with Jarvis' snare under cocaine, about *twenty-five* grains being consumed during the operation, and at the same time the patient was given "five or six big drinks of whiskey." The sections were begun with the cold wire and concluded with the galvano-caustic snare. In this way very little blood was lost and there was no pain. The left half of the tongue was removed, the patient recovering in ten days without the slightest constitutional disturbance.—*Virginia Med. Monthly*, May, 1888.

F. C. Smith reports two cases operated on by Syme's method as modified by Jordan.—*Brit. Med. Jour.*, May 19, 1888.

Dr. J. A. Wyeth controls hemorrhage in operating on the tongue by passing a Peaslee's needle, armed with silk, into the floor of the mouth, at the upper border of the hyoid bone. The jaws being widely separated with a gag, the needle is unthreaded in the buccal cavity and withdrawn, leaving the thread in position. The same needle is again threaded, this time with a finer silk, and carried through in like manner on the opposite side. When the point with the double thread accompanying it is seen to project into the mouth, with a tenaculum draw on the silk until it loops sufficiently to allow you to pass the end of the first silk cord between the shaft of the needle and the loop. By withdrawing the needle the strong cord is brought out at the point of entrance, and thus surrounds the

tongue and muscles of the floor of the mouth. A good-sized twisted wire, about one-sixteenth of an inch in diameter, is now fastened to the thread and carried in its stead around the tongue. Adjusting this to an *écraseur*, it can be made to constrict the vessels to any required degree. The operator can proceed with the extirpation of all suspicious tissues, and when through, by gradually easing up on the tourniquet, the bleeding points can be recognized and secured. In the mouth I use silk ligatures, as they are more readily tied and hold better than catgut, and always in these cases of buccal surgery I employ *rectal anæsthesia*. I have used this latter method about twenty times, and have never had an unfavorable symptom.—*Canadian Practitioner*, Aug., 1888.

Bleything (G. D.) on a Case of Sarcoma of the Tongue Cured by Operation.—The diagnosis in this case was confirmed by microscopic examination. The right half of the tongue was removed with scissors about two months after the lesion was discovered. No complications occurred, the patient made a good recovery, and no recurrence has taken place, now six years since the operation.—*N. Y. Med. Jour.*, June 23, 1888.

Emmet (T. A.) on Tracheotomy without the Canula.—The writer advocates joining the mucous lining of the trachea to the skin, after having removed an oval piece of the anterior tracheal wall. Silver-wire sutures are used in preference to silk.—*N. Y. Med. Jour.*, June 2, 1888.

In a paper on "Successful Treatment of Diphtheria," George R. Eakins expresses his intention, without apparently having heard of Emmet's suggestion, of operating in a similar way. He thinks the opening may be kept clear by passing a catheter or other mechanical means to free it from bronchitic or other secretions.—*Australasian Med. Gaz.*, May, 1888.

Waxham (F. E.), Report on Intubation.—The author gives a tabulated statement of his experience, of which the following is a summary:

Total number of cases, 150.

Recoveries, 41.

Percentage of recoveries, 27.33.

Average age of all cases, 3 years, 11 months, and 3 days. Average age of those recovering, 4 years, 3 months, and 24 days. Average age of fatal cases, 3 years, 8 months, and 7 days.

Since the above report the writer has had 9 cases with 3 recoveries, making a total of 159 cases with 44 recoveries, or 27.67 per cent.

He again recommends the metal epiglottis.—*Jour. Am. Med. Ass'n*, June 16, 1888.

Meier (G. C. H.) on a Case of Intubation for Acute Œdema Glottidis.—This is said to be the first case of the kind in which intubation has been done. The tube was introduced by Dr. Dillon Brown on the fourth day of an attack of laryngitis. The cause of the stenosis may have been œdema from Bright's disease or simple congestion. The tube was coughed out on the third day.—*N. Y. Med. Record*, May 5, 1888.

Thompson (J. A.) on Myxoma of the Larynx.—The value of this case is lessened by the absence of microscopic confirmation of the diagnosis. Its situations was the margin and anterior surface of the epiglottis, whence it was removed by means of the galvano-caustic snare.—*The Cincinnati Lancet-Clinic*, June, 1888.

Desvernine (C. M.) on Cystic Tumor of the Larynx.—The neoplasm, in this rare and interesting case, occupied the right vocal band. The patient died of carcinomatous infiltration of the œsophagus.—*Cronica méd. Quir. de la Habana*, No. 3, March, 1888.

Mackenzie (G. H.) on Cases of Endo-Laryngeal Removal of Growths from the Vocal Cords.—Several interesting cases are narrated. The first is a papilloma in a tuberculous patient, upon whom tracheotomy had been done. He was anxious to have the tube removed, so, as a preliminary, a warty growth was removed with Mackenzie's forceps from the posterior third of the left vocal cord.

The second case is interesting from a diagnostic standpoint, the microscope showing the neoplasm to be epithelioma, while the history and subjective symptoms warranted a more favorable opinion.

The third case is one of myxoma of the left vocal cord, and the fourth a polypus of the right cord. The former was removed with forceps, and the latter was detached by means of the laryngeal brush.—*Edinb. Med. Jour.*, July, 1888.

Transformation of Benign into Malignant Growths of the Larynx.—It is to be hoped that the result of the investigation of this subject by Dr. Felix

Semon will forever put at rest the fears of those timid operators who have been disposed to advise the abolition of endo-laryngeal surgery.

The *British Medical Journal*, July 14, 1888, in whose columns an adverse opinion was once expressed, makes graceful acknowledgment of the conclusiveness of Semon's statistics. Of 8,216 cases of benign neoplasms, 3,382 of which were papilloma, operated on by intra-laryngeal methods, *apparent* malignant degeneration took place in only 32 cases, in at least 16 of which there exists an element of doubt. This leaves a very insignificant percentage, and the question may be considered finally settled.

In the *Münch. med. Wochensch.*, March 8, 1888, Von Ziemssen reports a case of papilloma of five years' standing, operated on several times by endo-laryngeal methods. Recurrences took place and tracheotomy became imperative. The patient died of heart failure while recovering from anæsthesia. The growth was pronounced by Bollinger to be a papillary epithelioma, malignant degeneration being exhibited only at certain points. The causes of the change in this case were thought to be diminished vital resistance from extreme age, intemperance, cardiac weakness, and mal-nutrition, as well as topical irritation.

Statistics of Laryngeal Cancer, published by Scheier (*Deutsche med. Wochensch.*), showing the results of partial laryngectomy as compared with tracheotomy, indicate that the former is less dangerous than the latter. In 125 cases glandular infiltration was observed in only twenty.—*Medical Press*, July 4, 1888.

Dr. Dundas Grant reports a case of intrinsic epithelioma of the larynx greatly benefited by tracheotomy.—*Brit. Med. Jour.*, May 19, 1888.

Dr. J. Charazac publishes a case in which tracheotomy was done, extirpation being declined. He believes that laryngectomy should be reserved for cases of intrinsic disease, the general condition of the patient being good and the glands not involved.—*Rev. mens. de laryngol.*, etc., No. 6, 1888.

Gardner, who has recently done a total laryngectomy, does not believe that the partial operation is more successful than total excision. He advocates removing the whole larynx because: (1) the entire disease is more likely to be included; (2) blood and discharges can be prevented from passing down by section of the trachea at an early stage of the operation and insertion of a tight-fitting rectangular tube; (3) anæsthesia may be carried on through the tube without interfering with the operation; (4) the risk of perichondritis is less when the whole larynx is removed.—*Australian Med. Jour.*, May 15, 1888.

DISEASES OF THE EYE AND EAR.

BY A. T. MUZZY, M.D.

Ring (F. W.) on the Disastrous Results of an Artificial Drum.—A patient twenty-eight years old had been wearing artificial drums made by herself from larding pork, of a size to fill the external canal. She claimed that at first, eight years ago, she gained in hearing, but does not hear as well now as then. The watch being heard at one inch or $\frac{1}{40}$ in the right ear, and the left at $\frac{1}{40}$. Right A. C. 9 sec., B. C. 15 sec. Left A. C. 5 sec. and B. C. 13 sec. On removal of these drums canals found filled by purulent discharge, drum membrane in good part destroyed. Removal of plugs reduced hearing next day to watch on right side contact, left $\frac{1}{40}$. After careful treatment for five or six months, watch could be detected at $\frac{6}{40}$ in the right and $\frac{5}{40}$ in the left. At the time the shreds of remaining tympana attached themselves to the walls much pain was experienced. She showed wonderful recuperative power after eight years of abuse.—*Med. Record*, June 30, 1888.

Bacon (G.) on Foreign Bodies in the Ear.—Dr. Gorham Bacon reports 22 cases of this accident. In the summary of the cases there appear four more males than females. The first decade of life shows the largest number of accidents; from 30 to 40 had the next largest quota. Insects were most frequently found (5), and seeds in 4 cases. Of instruments used alone the forceps proved successful in 9 and the syringe in 5. The symptoms found were almost complete deafness, depending on size, shape, and position of the foreign body; sense of pressure, subjective noises, accompanied by more or less pain according to the amount of irritation and inflammation produced. The most serious trouble usually results from unskilful attempts at

removal, laceration of canal and drum-membrane, and hemorrhages. Reflex phenomena are occasionally met with. Even epileptic seizures have been stopped by removal of foreign bodies from the ear. These may occasionally remain in the ear for years without giving trouble. Zaufal and Lucae report cases where foreign bodies were removed after a residence of 40 years and more in the ear. Prognosis is usually favorable. When otherwise, danger arises from injury inflicted while attempting removal, or from impaction and swelling of the foreign body, or of the canal, or of both. Also when suppuration finds no outlet, inducing brain complications. In treating these cases first make sure that the foreign body is there ; neglect of this simple precaution has led to some serious trouble. Do not take the patient's word. Generally the use of the syringe, having the head inclined towards the affected side, is all sufficient. To prevent swelling of seeds or other foreign bodies that absorb water, oil has been used. But, skilfully used, and with promptness, warm water is better. In the case of insects they should be killed with oil before syringing. When the syringe is not successful sometimes one instrument and sometimes another succeeds ; no one instrument will suit all cases. For round and smooth bodies a camel's-hair brush dipped in glue will successfully draw them out. A few cases are reported where it was necessary to detach the auricle when the foreign body was impacted in the middle ear. Unless the use of speculum and head-mirror is well understood the safest method is to confine efforts to the use of the syringe and warm water.—*Gaillard's Med. Jour.*, New York, July, 1888.

Chisolm (J. J.) on Successful Transplantation of a Piece of Rabbit's Cornea into the Human Eye, for the Purpose of Restoring Sight.—Robert Gross, a short, healthy man, twenty-nine years of age, had both eyes burnt with caustic lime three years ago, leaving both lids in the left eye adherent to the globe and cornea, and the upper lid in the right eye in the same condition. One year ago, by plastic operation, the lids were successfully liberated, but the cornea did not regain its transparency. Dissecting off the fleshy growth over the cornea proved unsuccessful, as it very soon returned to a fleshy opaque condition. On the 5th of the present month Hippel's operation was performed on the left eye. This operation consists in first removing, by a delicate trephine a button of corneal tissue $\frac{3}{16}$ of an inch superficial diameter down to Descemet's membrane, but not through it. The fleshy condition caused considerable oozing at first. Then from a rabbit's cornea a button is removed by the same trephine, this time including Descemet's membrane. The button of rabbit's cornea fitted well, and being thinner than the human did not rise above the surrounding surface. The lids were closed by compress and bandage, and not inspected until the fifth day. No inflammatory action took place ; and when examined, the foreign cornea had become attached for three fourths of its circumference. At one side a little groove of separation was visible. The graft lost its transparency during the process of union. The same course attended operation on the right eye. Three weeks afterwards the graft in the left eye, that operated upon first, cleared so far that from a mere flood of light he now distinguishes the shadows of objects and the objects themselves dimly within several feet. The right is showing the same relative improvement.—*Maryland Med. Jour.*, June 30, 1888.

Kollock (C. W.) on Foreign Bodies in the External Auditory Canal.—The tolerance and intolerance of the ear to foreign bodies are frequently demonstrated, and, while some bodies, especially insects, cause the greatest agony, those of a different nature may remain in the ear for long periods without apparently causing discomfort. A remarkable case of foreign bodies in the external auditory canal has recently been under my care.

Mrs. D. consulted me for deafness, which was profound, as only the loudest tones with the mouth close to her ears could be heard. My prognosis was unfavorable, but at her request I made an examination of the better ear, and saw there a lump of hardened wax. This was with some difficulty removed, but its removal made little or no difference in the hearing. As the mass was removed it became somewhat disintegrated, and two objects resembling seeds were seen in it. Of this I said nothing, but intended asking my patient, after finishing the examination, for an explanation. In the meantime she happened to see the mass, and immediately exclaimed : "Are those seeds?" I replied that they

were. Whereupon she said: "They have been in my ear for *forty years*." She said that when nine years old she had poked two apple-seeds into her left ear, which her mother had tried to remove, but had not succeeded. She had never experienced any trouble, and supposed that long ere this they had worked their way out. The seeds were encapsulated by the wax until it became softened by syringing, and when first seen by me were perfect in shape, but when placed in water soon softened and disintegrated. The canal was apparently unaffected by their presence, and the deafness in no way connected with it, as hearing was worse in the other ear, and evidently the trouble was labyrinthine.—*N. Y. Med. Jour.*, Aug. 18, 1888.

Swann (A.) on a Foreign Body in the Ear for Eighteen Years. — A man, twenty-seven, consulted me in May, complaining of irritability of the fauces, particularly on the right side, and deafness on the same side. He said that eighteen years ago, when a child, he was playing with a piece of slate pencil, and poked it into his ear. He went to a medical man, who attempted to remove the body, but did not succeed. Deafness gradually supervened, and unless some conducting medium was used the man could not detect sounds at all. On examining the ear with a speculum, it was found to contain cerumen, but nothing else could be seen. A few syringefuls of warm water and carbonate of soda soon dislodged a long plug of what appeared to be cerumen, but embedded in this was a piece of slate pencil half an inch long, with its rounded end towards the drum of the ear. Hearing was immediately and perfectly restored, and on examination the tympanum was found to be perfectly whole and healthy. The throat symptoms cleared up in the course of a few days.—*Lancet*, July 7, 1888.

Sloughing of the Cornea from Cold.—A case of partial sloughing of the cornea is reported by Dr. Kuritzin, due to exposure for nine hours on a Russian steppe driving against a snowstorm. Both eyes were similarly affected, somewhat deep ulcers having formed in shape and position corresponding to the openings between the eyelids; the other parts of the eyes were scarcely affected at all. The patient, who had never previously suffered from any affection of the eyes, made a good recovery. —*Lancet*, Aug. 4, 1888.

OCCASIONAL REPORT ON DISEASES OF WOMEN.

BY JOHN S. HAWLEY, M.D.

Taneyhill (G. L.) on Atresia of the Vulva and Vagina. — An imperforate condition of the hymen is the most frequent form of vulvar atresia, while that of the vagina may be due to congenital deformity, to adhesive inflammation following parturition, mechanical injuries from other causes, ulceration from diphtheria, syphilis, typhoid-fever, variola, and the like. Complete or partial obstruction of the canal may be due to the presence of tumors, cystic degeneration of its walls, or prolapse of the same. Retention of the menstrual discharge is the prominent symptom of complete atresia in the unimpregnated woman, while mechanical obstruction to the advance of the child during labor indicates its existence in the case of the parturient patient. A physical examination of a virgin who has never menstruated should be made before she should be allowed to marry. In the treatment of atresia with retained menstrual blood, aspiration (when practicable), followed by free incision and irrigation, after the method of Dr. Jenks, is recommended, as the danger of decomposition and consequent sepsis if the fluid be allowed to escape gradually is great. Congenital absence of the vaginal canal is to be treated by tearing the areolar tissue present between the rectal and the vesical walls, after the existence of a uterus has been established by means of an exploration per rectum. A plug of some kind must be worn in the vagina after operation in all cases, for a length of time to be determined by the existing conditions; otherwise there is danger of a reproduction of the original obstruction. When the operation is performed for simple obstruction of the vagina, it is best done at a time about midway between two menstrual periods; if for the evacuation of retained menstrual blood, the time of election should be just prior to the expected menstrual epoch.—*Maryland Med. Jour.*, June 9, 1888.

Immediate Perinæorrhaphy.—Objections to this procedure have been urged by many, who hold that primary union may frequently be obtained in the wounds of the perinæum, caused by parturition, by the simple method of keeping the wound

clean, and of binding the knees of the patient closely together; that union cannot be expected when the wounded tissues are bruised and œdematous, and that the patient should be spared the shock of an operation after an exhausting labor. Those who do not meet with lacerations of the perinæum are those who do not look for them, or who are unable to recognize them when they exist. Spontaneous healing of the laceration occurs when this involves the mucous membrane or skin only, but not when the fasciæ or muscular tissues are torn, and opposition of the limbs has no influence whatever upon the result, as even the wide separation of the thighs can never produce stretching of the perineal tissues. The employment of sutures directly after confinement can do no harm, and usually results in union of the more extensive lacerations, while the plan of waiting for several months before operating allows the torn muscular fibres to retract and to become atrophied, thus making restoration of the perinæum to its original condition an impossibility. Moreover, if the edges of the tear are accurately brought into coaptation, a large surface, which presents an admirable gateway for the entrance of septic germs into the organism, is closed; and even if union does not occur, and suppuration of the wound ensues, the remedy is simple and easy. The use of antiseptic methods will almost invariably prevent such a result, and the fact that the immediate suture of all wounds of the vagina and perinæum is classed among the routine procedures of antiseptic midwifery by the physicians in charge of lying-in hospitals, is strong evidence that its employment has been followed by most satisfactory results. If the operation be successful, the patient is spared the anticipation of what is to her a most serious matter, and the introduction of a few sutures can scarcely be considered as liable to cause shock. The operation can do no harm, is simple and easy of performance, and may be of the greatest value.—*Ibid.*, Editorial.

Harris (R. P.) on the Excision of Extra-Uterine Gestation Cysts.—As regards the employment of additional section in the management of extra-uterine pregnancy, especially during the later weeks of gestation, the following statistics have been gathered from the reported histories of cases. The list of cases comprises only those in which the fœtus was viable and living, and in which the operation was done with the purpose of saving both the mother and the child. Thirty operations have been done, resulting in the recovery of five of the mothers, and the survival of twelve of the children for three months' time or longer. Four of the maternal recoveries occurred in the last ten operations, giving a mortality of 95 per cent. for the first twenty. The children were all alive when extracted, though the eighteen infants who lived for less than three months died after a time which varied from a few minutes to twenty-six days. In the last operation, performed by Breisky, the mother recovered, and the child died after nineteen days from an abscess in the abdominal walls, near the umbilicus. In this case alone was the *placenta and cyst* removed entire, the location of this being between the folds of the broad ligament, and consequently extra-peritoneal. In the greater number of cases the placenta was left *in situ*, but in three out of the five which resulted in maternal recovery, the organ was removed after ligation of the vessels supplying it.

As to the treatment of the condition in its early stages before rupture of the sac has occurred, the list of cases treated by either method is not long enough to warrant one in forming an opinion as to the respective merits of the two principal methods—abdominal section and excision of the sac, and the employment of electricity as a fœticide. If the former be chosen, the earlier in the progress of the gestation it be done the better, as it is then a much less complicated operation than when further advanced. The choice between the two methods of treatment will be doubtless made by the individual in accordance with his possession or lack of surgical ability and operative dexterity.

Occasionally the position of the fœtal sac is such that its treatment by vaginal section is indicated. Of thirty such operations but two were performed for the delivery of a living child, both of which resulted in the recovery of the mother and the survival of the child. Twenty of the mothers recovered; six were operated upon at full term, four of the fœtuses being dead; five of the women and two of the children were saved. In five of the cases rupture of the sac into the vagina had taken place, and in ten cases the fœtus had been carried from eleven months to twelve

years. In the two cases in which the children were saved, the placenta was removed without the occurrence of serious hemorrhage, though the use of a solution of perchloride of iron was needed in one of them. Warm distilled water should be used when the cavity of the sac is irrigated, for the sac wall may not be intact, and therefore allow the injected fluid to gain an entrance into the cavity of the peritoneum, which might resent the presence of an irritating antiseptic fluid. The sac should be opened by the red-hot cautery or by puncture, followed by tearing of the tissues, except in those cases in which the sac wall has been thinned by long-continued pressure. The practice of not attempting to remove the placenta is favored. The question of correctness of diagnosis can only be settled by the abdominal section.—*Am. Jour. of the Med. Sciences*, Sept., 1888.

Johnston (Geo. W.) on the Occurrence of the Mammary Secretion, Accompanied by Symptoms of Pregnancy in Non-Pregnant Women.—The histories of two cases, which were characterized by marked activity of the mammary glands, by decrease in the amount of the menstrual discharge, by morning nausea and vomiting by the presence of pigmentation of the skin about the nipples, by frequency of micturition, and by what were apparently fœtal movements, but presenting no physical signs upon examination, are related. In one case the uterus, which had previously been in its normal position, was found on examination to have become sharply retroflexed, and after the correction of this abnormal condition the galactorrhœa ceased. In the other case there was slight retroversion of the uterus, but no other condition which could be assigned as a cause of the mammary activity, which had existed for nine months at the time of writing. This may be due to a disturbance of function accompanying a premature menopause. Tilt having cited similar cases in which the breasts secreted milk, the menstrual flow was suppressed, and what were believed to be fœtal movements were felt. Duval, in a thesis entitled "De la secretion mammaire non-puerpérale" (Paris, 1881), gives as causes of mammary activity in non-pregnant women: 1, menstruation; 2, tumors of the breast; 3, affections of the utero-ovarian apparatus; 4, mechanical or psychic stimuli independent of any material modification of the organs; and also states that causes have been recorded in which the mammary secretion occurred after the menopause.—*Am. Jour. of Obstet. and Diseases of Women and Children*, Aug., 1888.

Cohn on the Primary and Final Results in Operations for Prolapsus Uteri.—The author deduces the following conclusions:

1. The continuous catgut suture gives the securest guaranty of primary union, in addition to relative ease and rapidity in the performance of the operations. The objections which have been made to catgut are not valid. The superficial union of the wound obtainable by this means gives a firm cicatrix, which is favorable to a permanent result.

2. Colpo-perinæorrhaphy may be the means of permanently curing even extensive conditions of prolapse. Hegar's method answers fully the demands which may be made on it. The reasons for failure, as regards complete healing, in nearly half of the author's cases, are:

a. A portion of the cases which are referred to *recurrence of the cause of operation* are not recurrences in the proper sense of the term, but simply cases in which healing did not take place.

b. A portion of the recurrences are attributable to incompleteness of the operation, only anterior colporrhaphy having been done.

c. The other recurrences are due to such factors as severe parturition, quick repetition of pregnancy, and particular anatomical conditions of the posterior vaginal wall. In order to obtain permanent results from operations of this character it is desirable:

First. In conditions of prolapse to operate upon the posterior vaginal wall at the earliest possible moment.

Second. To narrow the vagina as much as possible throughout its entire extent by the high operation of posterior colporrhaphy.

Third. To make as high a perinæum as possible, bringing forward the narrow introitus. The higher the perinæum the firmer the pelvic floor. The more the vagina is drawn forward the more favorable will be the chances of permanent recovery.—Translation in *Annals of Gynecology*, Aug., 1888.

Doléris (L.) on the Use of Combined Operations for the Relief of

Uterine Deviations or Displacements.—The operations to be employed consist of mechanical straightening of the uterus and the rupture of adhesions; dilatation of the cervical canal, trachelorrhaphy, scraping the endometrium, colporrhaphy, both anterior and posterior; perinæorrhaphy, and shortening of the round ligaments. These may all be required in the treatment of a single case, and should be done at as few sittings as possible. The operation of shortening the ligaments has been very valuable in the author's experience, has been easy of performance, and has not been followed by suppuration, except in a few instances. No pus has been observed since drainage of the wound has been abandoned. Antisepsis is strictly observed during operation. —"*Satellite of the Annual of the Univ. Med. Sciences*," May, 1888.

Dudley (A. P.) on Varicocele in the Female.—A varicose condition of the veins of the broad ligament is considered to be an analogue of varicocele of the spermatic cord in the male, and to be susceptible to the same plan of treatment as is the latter. The causes of the condition are constitutional and mechanical; the former classes consisting of: 1, arrest of the process of involution of the uterine and ovarian vessels after purturition; 2, a relaxed condition of the tissues resulting from a poor state of bodily health; 3, an unhealthy condition of the walls of the vessels. The mechanical causes are chiefly: 1, the influence of uterine displacements, especially prolapsus uteri; and retropositions of the organ, causing a rotation of the broad ligaments upon their transverse axes, and thus producing an obstruction to the venous circulation; and 2, the anatomical relations of the veins themselves, their great length subjecting their walls to the pressure exercised by the weight of a long column of blood, and as they are not provided with valves, this pressure is in no wise antagonized. Moreover, on the left side the veins join the renal vein at right angles to the course of its blood current, this arrangement constituting a material obstacle to the free discharge of blood into the general venous circulation. In addition the chronic constipation so often present in cases of pelvic disease is another great cause of obstruction to the venous circulation of the pelvis, through the pressure exercised by fæcal accumulations in the rectum and the sigmoid flexure of the colon. As in the male, this condition is more common on the left side.

The symptoms are pain of a dull, aching character, extending up the side to the region of the kidney, where, after the patient has been for some time in the erect position, is its greatest intensity. The pain soon disappears when the patient lies down, only to reappear when she stands erect. There is usually present a feeling of lassitude, unrest, and mental depression. Physical examination of the pelvic organs will reveal the presence of a thickened broad ligament, tender, and presenting a doughy consistence to the touch. Digital examination in the erect posture reveals an increase of this thickening, and after the patient has been on her feet for a time, digital examination per rectum will reveal a knotted, "angle-worm" condition of the vessels.

The histories of four cases are related, in all of which abdominal section was performed, and the enlarged vessels were removed by "quilting" with a silk ligature the base of the broad ligaments and cutting away the ligated portions which contained the varicose veins. In three of these the menopause had been passed, and in all recovery with entire relief of symptoms ensued. Microscopical examination showed the ovaries and tubes to be the seat of capillary engorgement, which was evidently of long standing.—*N. Y. Med. Jour.*, Aug. 11 and 18, 1888.

Boureau on the Employment of the Curette in the Treatment of Endometritis.—The following conclusions are offered by the author in regard to this method of treating endometritis:

1. Intra-uterine therapeutics realizes the only logical and rational treatment which is applicable to lesions of the uterine mucous membrane occurring in the evolution of an acute process.

2. Intra-uterine therapeutics should be radical, and necessitates the use of destructive agents capable of removing the last vestiges of the morbid tissue. Experience has shown that incomplete destruction of the diseased mucous membrane is almost always followed by a recurrence of the trouble.

3. Chronic endometritis of the body of the uterus is one of the most rebellious affections, and will yield only to destructive processes.

4. Such processes may be either caustics or cutting instruments.

5. The instruction which is furnished by a great number of cases is that the curette is superior to caustics both as to its action and as to security.

6. Curetting alone and curetting combined with *écouvillonage* (sponging or swabbing out) are operations which can be practised without submitting the patient to the least danger, always on the condition that the contra-indications are observed and a rigorous antisepsis practised before, during, and after the operations. The action of creasote as a caustic does not have the same danger which attends the use of those caustics which produce an eschar.

7. In the statistics of Doléris' clinic for 1887 one hundred and ten operations of curetting are recorded, with only one accident resulting. This occurred in a turbulent patient in the form of a mild attack of perimetritis from which she rapidly recovered. To these one hundred and ten cases may be added nearly four hundred additional ones performed in previous years without accident or complication which was worthy of notice.

8. Antiseptic *écouvillonage* may be practised alone in all forms of endometritis, especially in mild and recent cases. In long-standing hemorrhagic, vegetating, and polypoid varieties it is better to combine curetting with *écouvillonage*.

9. The *écouvillon* brushes the uterine cavity systematically, completes the action of the curette, and relieves the intra-uterine surface of the *débris* left adherent by the curette. It also furnishes an excellent opportunity whereby one may apply creasote to the surface which has been scraped.

10. Curetting may be considered a perfect curative means for different forms of metritis, especially for hemorrhagic metritis. In the latter condition it always gives good results, even after all other means have failed. It is sometimes necessary to repeat the operation at intervals more or less remote.

11. Curetting is not only a therapeutic agent which is worthy of our great esteem, it is also an exploratory measure which is often indispensable, for it enables one to establish an exact diagnosis by furnishing a layer of mucous membrane which can be submitted to microscopic examination. Exploratory curetting is also entirely harmless; the pain which attends the operation is quite supportable, and it may be done without causing the patient to remove her clothes.

12. The first menstruation which is due after curetting is usually missed, but the second usually comes on normally.

13. Curetting favors fecundity.—*Nouv. arch. d'obstet. et de gyn.*, June 25, 1888, and *N. Y. Med. Jour.*, Aug. 18, 1888.

MISCELLANY.

Do Library Books Spread Infection?—A good deal of discussion having taken place on the subject of the spread of infectious diseases by means of the books in circulating libraries, the Dresden municipal authorities have had a thorough experimental investigation of this question conducted. A number of much-used volumes from the town library were taken for the purpose. The dust from the leaves and covers was sown in nutrient media and cultures reared, the result being that no microbes belonging to infectious diseases were found—the dust being, in fact, nothing but ordinary dust of a harmless character. Again, the dirtiest leaves in the books were rubbed first with a dry finger and then with the wet finger. In the first case scarcely any microbes were found on the finger; in the second case plenty were found, but all appeared to be of a non-infectious character. Especially is it noted that there were no tubercle bacilli. Lastly, books were soaked for two days in spirit containing 10 per cent. of carbolic acid. This treatment destroyed all the bacilli, and proved harmless to the volumes. The conclusion arrived at was that the danger of circulating libraries spreading infection is very slight, but a recommendation is given to dust books well before reading them and never to wet the finger in the mouth for the purpose of turning over the leaves.—*Lancet*, Aug. 18, 1888.

[This article is of interest just now as bearing upon the compulsory, kissing of a filthy court Bible, which of late several bacilli-phobics have refused to do until compelled by the Court. As a remedy, let any one, called upon to take an oath, affirm, thus avoiding any microbes except what he may swallow in the act of saying "I do."—ED.]

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of

CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital; CONDICT W. CUTLER, M.D., Instructor in Diseases of the Skin, Post-Graduate Medical School, New York; JOHN D. HAWLEY, M.D., Attending Gynæcologist, New York Hospital, Out-Patient Department; FREDERICK PETERSON, M.D., Lecturer on Nervous Diseases at the New York Polyclinic.

VOL. V., NO. 39. September 27, 1888. WHOLE NO. 87.

CONTENTS.

	PAGE
Leading Article	461
Therapeutics	466
Pathology	471

LEADING ARTICLE.

On the Treatment of Yellow Fever.—In the *Atlanta Medical and Surgical Journal* for September, 1888, Dr. John P. Wall makes observations upon the diagnosis, prognosis, and treatment of yellow fever, based upon a personal experience with one hundred and thirty cases of that disease occurring at Tampa, Fla., last fall. With regard to the etiology of the disease the author has nothing new to offer, strenuously denying that it has any thing in common with malarial fever. There are practically two types or grades of this fever to be met with in an epidemic—one, whose main feature is an acute parenchymatous nephritic complication developed by the third day, and the other, having no such complication, ends with the first paroxysms of the fever and almost invariably terminates in speedy recovery, the patient being up and about as early as the fifth or sixth day. Not so, however, where albumen is detected in the urine on the third day; for while in this class of cases the high fever of the first three days may subside, and the pulse rate return to the normal, or even fall much lower, and the temperature be anywhere from 97 to 104 degrees F., the patient still continues in a most critical condition, and not unfrequently so remains for several days or even longer. In some instances the temperature and pulse are normal, and so remain after the subsidence of the first paroxysm of the fever; but there are plenty of indications, and especially the albumen in the urine, to show the serious condition of the patient. It is doubtless this class of cases to which relapses are attributed by a certain class of physicians who are always trying to explain away why they failed to cure all their cases of yellow fever.

The amount of albumen in the urine varies in different cases, ranging from five to seventy-five per cent. of volume of the total amount; and, as a rule, the greater the amount of albumen the more serious and less hopeful may be considered the prognosis. In these nephritic cases the eyes begin to show the icteric hue on the fifth day, and on the sixth or seventh day the skin begins to turn yellow. In rapidly fatal cases, terminating as early as the fourth or fifth day, the yellow hue appears earlier and is always well marked after death. This yellow color, which is characteristic of this fever in its worst and most fatal type, and has given the fever its name, is very rarely, indeed, if ever, present in cases unaccompanied by the nephritic complication. This is repeated because it is a most important fact to remember.

Hemorrhages from the mouth and nose are not infrequent in the severe grade of cases having the nephritic complication. The urine may be tinged with blood, imparting to the coagulated albumen a dark color, but hemorrhage from the urinary organs is seldom profuse; and as these hemorrhages never occur in the first three days' paroxysm of the fever, and only in cases with nephritic complication, there should never be any trouble in differentiating yellow fever from hemorrhagic malarial fever. The eyes become bloodshot in no inconsiderable number of cases. Epistaxis and bleeding from the gums are the more common forms of hemorrhage met with in this fever, and the nose-bleed is

often alarming. Among females past puberty, more or less uterine hemorrhage is almost certain to occur during the course of the fever, making its appearance from the third to the fifth day. Even in mild cases this uterine hemorrhage is rarely absent—and by mild cases it is understood that those without the nephritic complication are thus designated.

From the time the yellowness of the skin becomes fully developed until it begins to fade, the capillary circulation is extremely sluggish—so much so, in fact, that firm pressure on the chest with the open and separate fingers leaves their marks on the surface for a number of seconds, if not a full minute. Judging from the tendency to hemorrhage and the capillary stasis, which are such prominent features in severe cases of this fever, and taking into consideration the absence of bile in the urine in the large majority of cases, the conclusion is highly probable, if not positive, that this yellowness must be mainly dependent on pigmentation of the eyes and skin by the coloring matter of the blood, instead of being occasioned by the retention of bile in the blood—as in ordinary jaundice,—as is generally supposed and believed.

Suppression of urine, or a very scant secretion more or less tinged with blood, only occurs in the third stage of the fever —rarely, if ever, during the paroxysm of the first three days. And it is only in this graver type of cases with the nephritic complication that suppression of urine takes place, to be followed by spasmodic twitchings, stupor, convulsions, and death. These muscular twitchings are especially noticeable about the face. These nervous phenomena are supposed to be the effects of uræmic poisoning as a result of non-excretion of urea by the kidneys and its retention in the blood. But be that as it may, their occurrence is almost a certain prelude to a fatal termination, and in a prognostic sense is as bad, if not worse, than black vomit. Hiccough is never met with in the first fever—*i. e.*, before the fourth or fifth day, and is a symptom of the most unfavorable import.

The injected and watery eyes, swollen face, and anxious countenance, so generally depicted by writers on this fever, may be noticed in a large number of cases, probably the majority. The detection of albumen in the urine on the third day of the fever, and the subsequent icteric hue of the eyes and skin, establish the diagnosis of this fever beyond all doubt. The duration of the paroxysms of the fever for only seventy-two hours, or even perhaps a shorter time, and its abrupt termination, without the use of quinine, should excite, however, grave suspicion of its character; and this suspicion will be greatly strengthened if the chill came on in the night, and especially the latter part of the latter half of the night. Dengue is the only other fever of our climate which may be ushered in by chill at night, but its symptoms are too well marked to admit of its being mistaken for yellow fever, or *vice versa*, especially after a few days' watching and observation. This brevity of the first paroxysm of yellow fever in mild cases, its subsidence without the use of quinine, the severe frontal headache, with pain in the back and extremities, and the absence of the second paroxysm and eruption on the extremities of dengue, will rarely fail to indicate to the experienced physician the true nature of the case. Many yellow-fever patients emit a peculiar odor which the experienced physician has no difficulty in recognizing, though he may not be able to describe it by comparing it to any similar smell.

Daily observations should be made for albumen in the urine from the first to the fourth day, and if its presence is detected on the third day the diagnosis is probable, and if this is succeeded on the sixth or seventh day by the icteric hue of conjunctivæ and skin, the diagnosis is positive.

The mild cases of the fever—those destitute of the nephritic complication—will get well spontaneously with or without treatment, as a rule. In many cases, after the fever sets in the extremities remain cool, while the body heat is intense and pungent. And it is in this class of cases where mustard sitz-baths have been found so useful and beneficial in restoring the equilibrium of the circulation, as to render the mustard bath an almost universally common remedy in the beginning of treatment. The bowels should be evacuated with some efficient though mild purgative, and the febrile excitement controlled by the use of antipyretics—antipyrin and antifebrin. So far as my experience goes, mercurials do not appear to possess any special advantage, except possibly that the stomach is not likely to reject them as often

as it does more bulky drugs. Doubtless the common though possibly erroneous prevailing belief that yellow fever is only an intensified form of bilious fever, and that the icteric hue is dependent on the same cause as that producing jaundice, and hence the fault is the liver, has always attached more importance to the use of mercury in the shape of calomel in this disease than experience justifies. Castor oil or the more common salines will be found about as good evacuants of the *primæ viæ* as any thing else. Quinine is a useless drug in yellow fever unless there is some evidence of a malarial complication, when it may be advantageously used during convalescence, but it is perfectly valueless in controlling the disease. Administered in mild cases which would naturally recover, quinine may, and doubtless often has, received the credit of having cut short the fever as a *post-hoc propter-hoc* conclusion. Its being withheld, even in mild cases, is advantageous in a diagnostic point of view, for if the fever spontaneously ends by the end of seventy-two hours or earlier, the presumption is against it having been of malarial type.

Antipyrin in ten-grain doses every three hours appears to have a very beneficial effect in reducing temperature, promoting diaphoresis, and relieving headache and other pains. Its advantages over antifebrin are its analgesic properties and greater solubility, which renders its administration by enema in twenty- or thirty-grain doses almost as efficient as when administered *per os*. And this method of administration becomes sometimes necessary on account of nausea and excessive irritability of the stomach. The use of opiates is always hazardous unless there was some way of determining anterior to the third day that no nephritic complication would be developed, as their use, where this is the case, is apt to induce suppression of urine.

The safe rule is to eschew the use of opiates entirely in the treatment. An occasional exception to this rule may be made in cases complicated with other troubles, and where the kidneys are not at all or only slightly affected.

As to food and drink, the less taken the better, so as to keep the stomach as quiet as possible. Cold drinks are decidedly bad in the great majority of cases. Hot drinks are borne much better, and hence doubtless the common practice of administering lemon leaf and other teas. Possibly the benefit derived from these hot drinks is dependent on their constringing effect on the capillary circulation of the mucous coat of the stomach, on the same principle that injections of hot water are used in gynecology. For nourishment a tablespoonful of equal parts of milk and lime-water may be given every two hours, though if the patient is not naturally feeble, starvation may be practised.

In the graver type of cases, with the nephritic trouble, no line of treatment, after the third day, promises any certainty of success. So long as the quantity of albumen in the urine remains comparatively small and the kidneys continue to act tolerably freely, there is encouraging hope of recovery, though there is no means of telling when or how soon the action of the kidneys will become fatally impeded or suppressed and the case terminate in stupor, convulsions, and death, with or without black vomit toward the end. In this latter stage the tincture of digitalis in ten- to fifteen-drop doses every two or three hours may prove of some advantage as a heart tonic and diuretic. Of course, alcohol preparations are indicated to sustain the flagging vital powers; but unfortunately, like a great many other remedies, disappointment is only too frequently the result of their use. In the mild cases without the nephritic trouble any preparation of alcohol is rarely indicated, may be occasionally indicated in the nephritic cases where the quantity of albumen is small and the kidneys act fairly well, while in the worst grade of cases, it, like every thing else in the way of remedies, is likely to prove of little avail.

No remedies proved specially useful in relieving nausea and hiccoughs. Cocaine was tried without benefit. Carbolic acid in small doses proved a failure. In fact nothing but as complete abstention as possible from food and drinks appeared to do any good.

In direct contradiction to Dr. Wall's assertion of the inefficacy of quinine, comes the testimony of Dr. J. L. Cunningham of Dallas, Texas, who in the *Texas Health Journal* for September, 1888, details his experience with yellow fever during an epidemic at Hempstead, Texas, in 1867:

"The first four cases that came under my treatment in the epidemic of 1867 at Hemp-

stead, Texas, were treated for bilious fever of a malignant type. They were W. S. Wright, afterwards county judge, Captain Lancaster, commandant of the regiment stationed at Hempstead, Adjutant Bozman, and a saddler by the name of Starks. I did not suspect yellow fever, neither did the patients.

"Having about this time read in the *New Orleans Medical Journal* of the great reported success of an English physician in India—I have now forgotten his name—with quinine in large doses, accompanied with calomel if it seemed to be indicated, I treated all of these cases on this plan—varying the quantities to suit each case. I gave Wright ninety grains of sulphate of quinine and twenty grains of calomel in three doses four hours apart, and this was about all that I did give him, for his fever succumbed at once. Lancaster was furious in his delirium; was continually calling for his pistol, and had to be held in bed. I gave him sixty grains of quinine and four compound cathartic pills in two doses four hours apart, and poured bucketful after bucketful of the coldest water I could get on his head. His fever was gone in a day and never returned. Starks was treated exactly like Lancaster, only applications of cold water to the head were not used so vigorously. About one or two bucketfuls were poured on his head, and then cold towels were kept constantly applied. He made a prompt recovery. Bozman was not treated so vigorously, neither did he make so quick a recovery. These cases were among the first that occurred after Voorhees' death. All of them had been near him. Some of them had helped to bury him. They all recovered. They all remained at Hempstead during the entire epidemic of four months; and they all helped to nurse the sick and bury the dead.

"My experience with these four cases influenced to a great extent my practice throughout the epidemic. When called in the incipiency of an attack before molecular or chemical changes had been wrought in the organic structures and fluids of the system, I generally gave quinine in large doses, frequently combining it with calomel. When called late my treatment was expectant, but by no means 'do nothing.' I tried to forget that I had yellow fever to deal with, but conditions. I treated scarcely any two cases exactly alike. I found my patients generally demoralized by fear and that their minds needed doctoring quite as much as their bodies. I am thoroughly satisfied that fear killed two of my patients.

"A large proportion of my cases had serious brain complications. Some of these I bled by cutting the temporal artery, others I treated by cold affusions of water to the head. The skin was very sensitive to draughts of air, so that it was generally necessary to cover the patient with a blanket or quilt and thus favor diaphoresis.

"The stomach required close watching; if loaded, I emptied it with an emetic of mustard and water—rarely gave any thing else for this purpose. If irritable, I applied a mustard plaster first, to be followed by towels wrung out of hot brandy or whiskey into which had been stirred bruised cloves. Instantly I gave morphia, two grains; kerosote, thirty drops; acetic acid, one drachm; water, four fluid ounces: one teaspoonful occasionally. Small pieces of ice were allowed. Later on, small quantities of champagne were allowed if the patient was much prostrated; particularly if black vomit had set in. I found muriated tincture of iron good for this condition. I gave it in large doses—frequently as much as one teaspoonful every three hours, well diluted with ice-water or iced lemonade. For suppression of urine, I cupped the loins and applied hot turpentine stupes or rubbed the small of the back with hot whiskey. Very few recovered when once this symptom set in. I preferred enemas to purgatives. As my treatment was what many will call heterodox, I feel called upon to make the following statement to show whether or not my treatment was reasonably successful, and gave satisfaction to the parties interested:

"Dr. Smith, the surgeon of the post, died about the breaking out of the epidemic. I was employed by the government to take charge of the regiment as contract-surgeon. I treated all of the cases of yellow fever that occurred for about two months. A regular surgeon was then called and put in charge. Nearly every case he treated died; and so great was the dissatisfaction found with his treatment that he was dismissed and I was invited to take my old place as contract-surgeon, which I held to the close of the epidemic.

"As bearing upon the subject of the quinine treatment, I wish to make a further statement:

"I was told by my friend, Dr. J. S. Baily, a Northern man from Albany, N. Y., who went through the epidemic in 1859 at Hempstead unscratched, although constantly engaged day and night visiting and waiting upon the sick, that he made it an invariable rule to take not less than ten grains of quinine every morning during the epidemic, and to this he attributed his immunity. Every single Northern man who was in Hempstead in 1867, without a single exception, took the fever, and why Dr. Baily, a Northern man, should alone escape in 1859, is entirely inexplicable on any other hypothesis than that the quinine acted as a prophylactic."

Dr. R. H. Day,[1] of Baton Rouge, La., putting a proper estimate upon the bad effect of fear upon a patient, tries at first to inspire confidence, moral courage, and hope. He induces diaphoresis and keeps skin moderately active, empties the stomach by a warm draught, and then quiets the stomach by cataplasms and internal remedies. When constipation is present he relieves it by enemas if possible; if some cathartic is absolutely demanded he gives salts and senna in small doses properly guarded.

When cerebral symptoms are marked he bleeds, and says he has never lost a patient he has bled. He says:

"I affirm my conviction, that there is no other prompt and efficient means of relieving this dangerously excited and congested vital organ. To trust to revulsives and cerebral and cardiac sedatives in such extreme cases, were certain death.

"Besides, all this diatribe of late years, against blood-letting, of drawing off the vital fluid in sthenic and inflammatory diseases, and the dangerous debilities and slow convalescences following the abstraction of blood, is the sheerest nonsense, having no foundation in fact, in sound reason, or correct physiology. It is a bugbear that serves only to make cowards of the timorous, to put in jeopardy human life, and should be spurned by all intelligent and scientific physicians."

In other, and most cases, where the tongue is furred, the saliva thick and clammy, the epigastrium and right hypochondrium tender under pressure, with a feeling of constriction around the waist, the urine scanty, the eyes injected, temperature elevated, respirations hurried, with pain in the head, back, and limbs, there is present a septic condition of the system, with a tendency to rapid destruction of the mucous coat of the stomach, functional and structural change of the liver, disorganization of the kidneys, and decomposition of the blood. To meet and relieve these conditions, the author usually prescribes twenty grains calomel, thirty to forty grains quinine, divided into four equal parts, giving one dose every four hours, till all are taken, beginning in the *hot stage*, as early in the attack as possible, provided there are no brain complications to oppose the use of quinine.

Under these remedies the fever subsides, the patient becomes calm and comfortable, the urine more abundant.

If a hemorrhagic tendency displays itself, or black vomit threatens or takes place, the free and liberal use of the muriated tinct. of iron, in teaspoonful doses, diluted with ice-water and lemon syrup, followed by champagne in shaved ice, is potent for good.

If suppression of urine should supervene, the author applies dry cups over the kidneys, and frequent frictions up and down the back with warm whiskey, spirits of turpentine, and tincture of digitalis.

"Such," says the author, "have been my general plan and details of treatment in the epidemics of yellow fever through which I have passed. I speak of it with some degree of assurance, and with some little self-pride, if you please, because it gave me the most gratifying results; the number of fatal cases not rating above 3 to 3½ per cent. And I venture to affirm that my practice embraced the same character of cases and among the same classes of people as fell to the lot of other physicians practising in the same localities and the same epidemics.

"There are several points in relation to the therapeia of yellow fever that, it appears to me, ought to be better understood and more definitely settled. Among these is the question of the utility or non-utility of quinine. It will be observed, in my preceding remarks, that I claim for it valuable curative properties, if timely used, in suitable cases. Some physicians of large experience think differently. Both cannot be right. This discrepancy of opinion must then be explained by reference to the time and conditions under which the drug

[1] *New Orleans Med. and. Surg. Jour.*, July, 1888.

is administered. For it is obvious that every drug and chemical agent has a definite composition and fixed properties and definite and uniform therapeutic effects upon the animal organism, when given in like conditions, with the same surroundings, in like temperaments and constitutional proclivities, when given in the same dose. And hence, in observing the action of drugs upon the human system, the absolute importance of recognizing and appreciating all these modifying circumstances must be apparent to every intelligent observer.

"That quinine can exert a salutary influence in the treatment of yellow fever in the practice of one physician, and be of no benefit in the experience of another, if used under the same systematic conditions and the same pathological lesions, is physically, physiologically, and therapeutically impossible. I aver, in my practice I have found it uniformly useful in all of the epidemics from 1853 to 1878."

According to Dr. Paul Gibier,[1] who was deputed by the French Government to investigate the whole question of yellow fever, yellow fever is due to the development of the microbe in the intestine, the affection being therefore essentially a local one. As to treatment, in addition to tonics and stimulants when required, and frictions for the renal complication, he advises that the main treatment should be directed to the intestine. Every morning a good purge should be given—the first day 1 oz. to 1½ oz. of sulphate of soda, the second day 1½ oz. of castor oil, and the third day 15 grains of calomel, the same series being repeated during the rest of the first week. If the medical man is only consulted on the fourth, fifth, or sixth day, the stomach should be washed out previously to the administration of purgatives, the colon being subsequently irrigated with a special tube in order to get away as large a quantity as possible of the toxic matter. A case is mentioned which was apparently hopeless, the patient being semi-comatose, where an enema produced an extremely copious stool, followed by rapid improvement and ultimate recovery. In fact, Dr. Gibier would treat yellow fever as an infecting ulcer "by washing and disinfection." He recommends in addition to hydrochloric acid lemonade, which is taken as a drink, three different mixtures, all to be taken together. 1. Perchloride of mercury ¼ to 1 grain, brandy 2 oz., mucilage 2 oz., infusion of coffee 5 oz.; the whole to be taken in numerous divided doses during the twenty-four hours. 2. Naphthaline 7½ grains, made up into a paste; from five to ten times this quantity to be taken in the twenty-four hours. 3. Tannic acid 7½ grains, made into a paste; to be taken from six to ten times in the twenty-four hours. A case is given in detail in which this treatment immediately changed the aspect of an apparently very grave case, the patient making a good recovery.

[1] *Lancet*, July 14, 1888.

THERAPEUTICS.

Garland (G. M.) on Gelsemium Sempervirens.—I intend to specify in this article some conditions in which I have found gelsemium useful for mitigating suffering and correcting perverted nervous functions. Foremost among such conditions come *hysteria*. In those crises of cerebral excitement, which were formerly combated by assafœtida and valerian, I know of no drug which can excel gelsemium. Inasmuch as it affects the motor regions of the nervous system before the sensory, it is usually necessary to push its administration until diplopia and heaviness of the lids appear, in order to reach satisfactory results. In some forms of headache gelsemium has no rival. Catarrhal headaches, and those which accompany dysmenorrhea and nervous debility from overwork, are amenable to gelsemium. This drug will also conquer neuralgias of the superior branch of the fifth pair when they are not referred from neighboring inflammatory or irritated conditions which should of course be sought out and treated, if present. The headaches of Bright's disease may be mitigated by gelsemium, but I have had no success with it in ordinary bilious or sick-headaches.

In the early stage of acute bronchitis, when the cough is disturbing, tubes are dry, and there is pain across the chest, gelsemium will relieve this distress, start up the bronchial secretions, thereby furnishing material for expectoration and diminution of the inflammatory tension. The bronchial glands are not the only ones influenced by gelsemium. The sweat glands are also subject to its action, and, given

under proper conditions, this drug is an unfailing diaphoretic. Follicular tonsillitis is usually accompanied by soreness of the throat, high fever, neuralgic pains in the head, back, and legs, all of which discomforts abate rapidly with the diaphoresis induced by gelsemium. In such cases I cover the patient with plenty of blankets, order him to keep his arms and hands under the clothing, and give him three to five drops of gelsemium every hour until he sweats or has taken fifteen to twenty drops.

The relief to the suffering is rapid, and the patient usually sleeps while he sweats. Acute muscular rheumatism is also amenable to this kind of sweat. Gelsemium will allay excitable reflexes, and diminish the nervousness of passive cerebral congestion, and some writers claim good results from its use in acute meningitis.

McKay, of St. Louis, recommends gelsemium to replace quinine for malarial chills. He gives one quarter to one half drop doses of the fluid extract every twenty minutes, beginning three hours before the expected chill, and he has had excellent results from this treatment. Dr. Charles G. Davis, of Chicago, gives small doses of gelsemium to soften a rigid unyielding os, and he says that fractional drop doses at frequent intervals will diminish after-pains. Dr. M. L. Chamberlain, of Boston, combines gelsemium with quinine to correct the ringing in the ears and headache which the latter drug often cures. By means of this combination he has been able to give quinine to sensitive patients, who were otherwise unable to take it.

The dose of gelsemium depends upon the preparation used and the results which one desires to obtain. For the relief of neuralgias one should give three to five drops every half-hour or every hour, according to the intensity of the pain. To produce sweating, one drop every half-hour is sufficient, but the patient should, of course, be well covered up in bed, and protected from the cooling effects of surface evaporation. One drop of the fluid extract every hour will relieve the cough and discomfort of acute bronchitis, and fractional drops can be used as above cited. The tincture of gelsemium is slightly weaker than the fluid extract. The active principle in gelsemium is gelsemin, which can be given in one quarter to one half grain doses, but I prefer the plain drug itself. For convenience the extract and tincture can be prepared in tablet form of one minim each, and then dissolved for fractional doses.

The advantages which gelsemium can legitimately claim are:

1. It has an agreeable taste, and is not repulsive to adult or child.

2. It does not irritate the stomach or bowels.

3. It produces no depressing after-effects from ordinary doses. The sleep is natural and the patient awakens refreshed.

4. In ordinary doses it causes no depression of the heart, and it can be used in all forms of organic disease of the heart.

5. It does not create a habit. There is no depression of nerve centres following its use, and therefore no craving for more of it.

6. Its toxic symptoms are very characteristic and striking, and they appear early, so that plenty of warning is given—*Bost. Med. and Surg. Jour.*, Sept. 13, 1888.

Murray-Gibbs (J.), on Diphtheria and Its Cure by Constant Blue-Gum[1] Steam. — The constant blue-gum-steam treatment will cure diphtheria in all its forms—such is the result of my experience. This summer and autumn to date, I have treated 110 cases without a death, and Dr. O'Carroll 150 with one death from subsequent paralysis, whilst a colleague has lost six during the same epidemic out of about 45 cases, using other treatment.

The treatment required is to subdue the inflammation resulting from the deposit of poison in the throat, and to kill the poisonous agent. Constantly breathing warm steam can alone enable all the affected parts to be treated. Intermittent steam is like an occasional poultice to an external part. The oil of eucalyptus globulus is not only an antiseptic, but it has a peculiarity which makes it most suitable for the treatment of diphtheria, in that. if taken into the stomach, it reappears in the secretion of the glands of the throat. It disinfects the membrane and discharges on the mouth and throat in a very short time. Patients, breathing an atmosphere charged with it for a week, are not weakened, notwithstanding the depressing effects of the diphtheria poison. It counteracts this depressing effect; in consequence of this I have seldom to use tonics after an attack of this disorder. Children never object to this

[1] Eucalyptus.

treatment, playing under their tents with their toys, and are able to take plenty of nourishment during the whole duration of the disease. I hardly ever give stimulants, and then only a little home-made wine—brandy never. In fact, I consider stimulants contra-indicated in diphtheria, owing to their effects upon the heart. They should never be given early in the attack. This treatment prevents the disease spreading to the larynx. The only cases of this complication occurred 16 miles away, and in cases of grown up girls who resisted the constant steam, but they quickly returned to it on their breathing becoming affected. The disease is prevented from spreading to other members of the family by the tent I place them under, and which is made with with an open umbrella placed on the bed with a sheet over it. I have attended 54 families suffering from this disease this summer, and in 36 of these only one member was attacked. The infection is strongest after the throat is free from the membrane; of this I have had ample proof.—*Australian Med. Jour.*, July 15, 1888.

Mitchell (S.) on an Unusual Effect from the Use of Cocaine.—I applied a ten per cent solution of coacine to a patient's right nostril by means of pledgets of cotton, preparatory to reducing an hypertrophy of the middle turbinated with the galvano-cautery. In making the application some of the solution passed into the throat and my patient complained of slight nausea. I used the cautery without causing scarcely any pain; but immediately after the operation she complained of a general lassitude both of mind and body, quickly followed by a sensation of numbness in the right arm, then of the right leg and foot, finally of the whole right side of the body except the head and face. There was no feeling of faintness complained of, nor was there any tremor such as I had previously noticed from the toxic effect of cocaine. In another case, a young lady, twenty years of age, where I injected ♏ x. of a ten per cent. solution into one of the tonsils, preparatory to excision, she was instantly seized with an uncontrollable tremor of the whole body, accompanied by hurried respiration and faintness.—*Med. Record*, Sept. 15, 1888.

[In the former case the "hemi" distribution of the symptoms is interesting, in view of the preponderance of hysteriform symptoms in cocaine poisoning.]

McManus (J.) on the Use of Large Doses of Calomel in Pneumonia.—With no claim to novelty the author reports favorably upon this treatment as carried out in sixty-two cases of true croupous pneumonia, of which fifty-eight recovered promptly, one turned into phthisis (still alive), one slowly convalesced (three months), and two died (one on fifth and one on eighth day).

The doctor thus describes his method:

My method is to give from thirty to sixty grains of calomel at the first dose, and in every case, unless it be given too late in the disease, it will bring down pulse, temperature, and respiration in from six to eighteen hours.

I do not believe it to be of any use to give it after the fourth day of the disease, and I think at or near the crisis it will do harm. I cannot help thinking that if I had been able to give one case I have described the calomel two days earlier, he would not have run on to fibroid phthisis. And I cannot help believing that I diminished one man's chances to whom I gave twenty grains near the crisis. Further, it does not seem to act so well in cases where the patients have been chronic drinkers. It does them good—diminishes pulse, respiration, and temperature,—but their convalescence seems to be much slower.

It may be urged that all of my cases were not true pneumonia, but I think I could hardly make a mistake in all of sixty-two cases. I have given it, with good effect, in two cases of pneumonia occurring in the puerperal state, and I have given it in one case of pneumonia in a pregnant woman, and had the pleasure of seeing her recover promptly without aborting. I afterward delivered her of a healthy male infant, three months after her attack of pneumonia.

To recapitulate:

I give from thirty to sixty grains of calomel not later than the third day of the disease. A smaller dose may be again given later.

Its effects are: It reduces pulse, temperature, and respiration, diminishes the pain, and renders the further progress of the case more comfortable to the patient, and, I firmly believe, brings on the crisis earlier. From such large doses of calomel you will rarely get more than one or two loose, though otherwise natural, stools.—*Med. Record*, Sept. 8, 1888.

Gifford (H.) on the Germicidal Action of Peroxide of Hydrogen.—Regarding the mode in which the peroxide acts, the common impression fostered by alleged observations, that the bacteria and pus globules ars rent asunder, and reduced to a mass of débris by the violence of the decomposition, is erroneous. After an exposure of an hour, all active ebullition having ceased, I have failed to observe any appreciable change in the appearance of anthrax spores and bacilli, though they were killed dead as stones; and pus globules, after many hours' exposure, though changed in appearance, still retain their contour. Neither is it, in my opinion, the nascent oxygen which kills the germs. Formerly, in common with many others, I believed that it did, and would watch with glee the mass of bubbles resulting from an instillation of the peroxide into a suppurating ear, considering each bubble the signal of the death of many micrococci. As a matter of fact, however, a partly decomposed alkaline solution, which foams much more furiously (*i. e.*, gives out nascent oxygen more rapidly) than a fresh slightly acid solution, is much less efficient than the latter. The germs, apparently, are not killed by the ozone liberated, but are simply poisoned by the undecomposed peroxide just as they are by carbolic acid and sublimate. In other words, while the ebullition, by its mechanical effects, is what makes the peroxide valuable as a cleanser, when it comes to germ-killing, with a solution of a given strength, the less bubbling the better, except in so far as it favors the access of undecomposed peroxide to germs protected by secretions.

Tromp finds that H_2O_2 in the proportion of $\frac{5}{10.000}$ kills anthrax spores in twenty-four hours, typhus bacilli in five minutes, and that cholera bacilli are killed in less than five minutes by $\frac{1}{10.000}$. Unless typhus and cholera bacilli are especially susceptible, these results would indicate a greater germicidal power than I have found, as a fifteen-volume solution is supposed to contain something more than three per cent. of the peroxide; but without knowing just what preparation Tromp used, a profitable comparison of our results can hardly be made.—*Med. Record*, Sept. 1, 1888.

Taylor (John). Venesectio ad ℥ xvj.—In a recent case I have been struck with the great value of a now all but discarded remedy, a remedy which in the past was in the first and foremost rank, but which has in recent years been relegated to an obscurity from which it will doubtless eventually emerge and again occupy a standard position in our therapeutical arsenal, a remedy so potent for good if rightly applied, so productive of evil if misapplied or used without due care and discrimination. It will be admitted that cases do occur in which the demand for it is self-evident, and but little scrutiny is required to induce its adoption. During the last twenty years of my practice I have bled several times, generally in well-marked instances of plethora, and to relieve prominent symptoms, and I have never once had occasion to repent of my deed. I can call to mind three cases in particular in which the benefit was so marked and immediate that there could be no manner of doubt as to the measure which yielded the result; such cannot be said of most of our remedies.

The therapeutics of the day are probably in advance of the therapeutics of our forefathers; but why should a remedy of such acknowledged power be wellnigh entirely shelved? Were our forefathers always in the wrong? Take up the most popular standard work on therapeutics and not a line is devoted to the consideration of blood-letting. The case which leads me to these remarks is briefly this: W. H., aged fifty, the subject of mitral regurgitant disease, with pulsating jugulars, heart's action irregular and tumultuous, pulse feeble and very intermittent, sense of fulness about the chest and abdomen, so that he was generally to be seen with his waistcoat and upper part of his trousers open; liver enlarged, blood rushing to his face when he stooped, with occasional slight epistaxis; his lips, cheeks, and the lobule of both ears livid; his breathing so oppressed that he was frequently obliged to stop when walking or exerting himself at all, sleeps only for a short time, wakes up suddenly and becomes restless, etc. These symptoms failing to yield to mercurial and saline purgatives, digitalis, and diuretics, sixteen ounces of blood were taken from his arm, which turned into a dark and very firm clot, surrounded with little serum. His pulse became more regular and fuller, his symptoms were immediately relieved, and should they in the future recur he will not, I am sure, fail to appear for a repeti-

tion of the remedy.—*Brit. Med. Jour.*, July 28, 1888.

Doubleday (E. T.) on a Case of Suppurative Pericarditis Treated by Aspiration.—Preliminary to a narration of his case the author calls attention to some facts gleaned from a series of 56 cases of pericarditis collected from the New York Hospital case-books. Of these 56 cases, 39 occurred in males and 17 in females. This is doubtless due to the fact that males are more exposed to weather and more addicted to drink than the female portion of the race. Pericarditis is most prevalent between the ages of twenty and thirty years, as 25 cases—over 44 per cent. —of the 56 cases occurred between these limits. One case occurred in a child of eleven months, and one in an old man of seventy-two years. The average duration of the disease, as near as can be ascertained, was thirty days and four-fifths in the cases which recovered, and thirty-four days and five-sixths in the fatal cases. Thirty-two cases ended in death, and 24 cases recovered. Effusion, as proved by the pulse, dyspnœa, and physical signs, took place in 28 cases—just 50 per cent. Of these, 16 cases died and 12 recovered. Twenty-five cases were complicated by rheumatism, 11 cases by chronic nephritis, and 5 cases by both rheumatism and nephritis, making 41 cases, or 73 per cent., in which complications existed. In 13 of the rheumatic cases the patient was suffering from an attack of rheumatism at the onset of the pericarditis. A cardiac valvular lesion was present in 18 cases, and in 6 of these the lesion was evidently coincident in time with the pericarditis. Acute pleurisy occurred in 16 cases. Other complications were fatty heart, catarrhal pneumonia, and cirrhosis hepatis. In only 3 cases did the disease seem idiopathic. In 9 cases the fluid in the pericardial sac was purulent. Eight of these died and one recovered. In the case that was cured, the fact of the fluid being purulent was discovered by aspiration. This proves that cases of purulent pericarditis may recover.

Aspiration was performed in four cases. Two cases were much benefited by it, but in the other two no effect was noticed. It is worthy of note that in the case of the child eleven months old, six ounces and a half of pus were found in the pericardial sac on autopsy.

There is no difficulty in the actual performance of either aspiration or drainage of the pericardium; but the reasons why one or the other is not performed more frequently are as follows: First, three fourths of the cases of pericarditis occur as complications, and most of these do not require or are beyond operative help. Secondly, the average medical man is much averse to any interference with the pericardium under any circumstances, and, as a result of this, some patients die from the large amount of serous effusion who could be saved by aspiration, and some die with purulent effusion who might be saved by drainage.

The author's case was a male of 26. The patient never had any symptoms either of rheumatism or nephritis. The pericarditis was probably idiopathic. There was almost entire absence of fever while the case was under observation. An immense amount of pus was withdrawn at one time, fifty-one ounces. Over seventeen pints of pus were withdrawn from the pericardium in thirty-four days' time.

Wyss cites a case in which there was a pyopericarditis followed by the formation of a fistula lasting for years. The patient finally died of an attack of acute pericarditis.

The author believes that in cases of pericarditis where there is a distant and muffled heart-sound, with a weak and rapid pulse and dyspnœa, an exploratory puncture with a hypodermatic needle should be performed; that, if pus is present, the pericardium should be thoroughly aspirated: and that if, after two aspirations, the pus reaccumulates, an operation should be performed to establish drainage, and the cavity be washed out, if this be deemed expedient. Of course, in aspirating, the physician must take the risk of converting a serous into a purulent inflammation, as sometimes takes place in cases of pleurisy, even when the best antiseptic precautions are taken.

In cases in which drainage or washing out of the pericardium is employed, he thinks it would be well to prevent the pressure of the air upon the heart, as in fourteen cases of pneumo-pericardium, ten died from either sudden heart failure or asphyxia. This might easily be done by the use of a rubber bulb, with a valve opening outward, on the end of the drainage tube, or by keeping an aspirator attached to the end of the tube and by

occasionally turning the ratchet, so as to keep up a slight vacuum. *N. Y. Med. Jour.*, Sept. 1, 1888.

PATHOLOGY.

Acute Articular Rheumatism in the Nursing Infant.[1]—Dr. Henry Koplik, in the *N. Y. Medical Journal* for June 23, 1888, narrates two instances of the above disease.

CASE I.—Female infant, aged six months, nursing at the breast, of good development; no previous illness. Mother states that six days previous to the time when the child was seen by the writer it had developed pain, heat, and redness in the joints of the left foot; this was followed by a similar affection of the left wrist and finger joints of the left hand. There was fever, also some profuse perspiration. When the child was seen the metatarso-phalangeal joints of the great toe and the neighboring three toes were much swollen, red, and painful; the temperature of the joints was increased to the touch. The dorsum of the foot was swollen and œdematous; the last phalangeal joint of the great toe was swollen, red, and painful. On the left hand all the metacarpo-phalangeal joints, except that of the thumb, were swollen, red, and painful; the left elbow was in the same condition. The last phalangeal joints of the left hand were in the same condition also. The temperature of all the joints was raised to the touch. The body temperature in the rectum was 105.5° F., pulse 180, respiration 48. A profuse perspiration was present, restlessness was extreme, the skin was clear, there was no eruption. Examination of the heart revealed a negative result. The lungs showed the presence of an acute broncho-pneumonia. The urine was normal, the bowels were regular. No other joints subsequently became affected. The temperature gradually began to subside three days after seeing the child. At this time the temperature was 102.5°, pulse 186. The joint affection in the hand and elbow was the same, but the foot was beginning to improve. Five days after the child was first seen by the writer, and on the eleventh day of the disease, a scarlet-fever eruption appeared on the chest and spread over the body. During the stage of desquamation some of the joints remained swollen and painful. This tenderness of the joints did not subside completely until the eighth week after the onset of the rheumatic affection. At no time were there signs of endocarditis.

CASE II.—Female infant, aged nine months, nursing at the breast, of good weight and development; no previous illness of any kind; no history of skin eruption or scarlet-fever; no signs of rhachitis present. Ten days previous to consultation the infant had developed redness and swelling of all the metatarso-phalangeal joints of the toes of both feet. Also all the joints of the fingers became affected similarly after a short time. There were fever, vomiting, extreme restlessness, and cough. The patient showed signs of pain when the fingers were handled. When seen she had swelling of all the joints named on both feet. The infant was very anæmic, and there was an increased temperature over the joints. The skin of the dorsum of the feet was œdematous. The metacarpo-phalangeal joints and all the phalangeal joints of both hands were swollen, red, and painful. The fingers were held in an extended condition, the thumbs adducted, resembling the condition and position seen in athetosis. The temperature in the rectum was 102°, pulse 126. The lungs showed an acute bronchitis. The heart showed nothing abnormal.

On March 30th, nine days after the writer first saw the child, and in the third week of the disease, recovery was complete. Under the influence of treatment the pain in the joints, redness, and swelling had slowly subsided, the child became less restless, and after the time mentioned could be looked upon as completely convalescent. The joints, though stiff, were moved somewhat by the little patient; no signs of synovitis were present.

Dr. B. A. Duncan of West Point, Miss., narrates[2] two similar cases.

CASE I.—I was summoned to see the infant son of Mr. R. W., who was only two weeks old, with the statement that the child would cry upon the slightest movement. I found the temperature above normal, with considerable swelling of both elbow-joints. I informed the parents that it was a case of rheumatism, and gave

[1] See MEDICAL ANALECTIC, 1888, p. 315.

[2] *Jour. Am. Med. Ass'n*, Aug. 25, 1888.

mercury and salicin every three or four hours. The child in a few days was much improved, and was very soon quite well. The mother informed me several weeks later that she had suffered with rheumatism during the entire period of gestation.

CASE II.—The physician who attended Mrs. K. in her confinement had informed me that she had after-pains of a character that he had never before witnessed, and failed to be relieved by treatment such as he had usually prescribed. About two weeks later I was called upon by Mr. K. to give him some remedy for a persistent colic—stating that both he and Mrs. K. had not had a night's rest since the birth of their child, who cried incessantly at night unless under the influence of an anodyne. His bowels were constipated, never having an action unless from the effect of a cathartic. Suspecting rheumatism from a previous history of the mother's case, I so expressed myself. Mrs. K. was given :

℞	Acid. salicyl.	ʒ vj.
	Bicarb. sodæ	ʒ iv.
	Glycerin.	℥ iv.
	Aquæ	℥ iv.

℥. et S. A tablespoonful every four hours for thirty-six hours, then a dessertspoonful three times a day until relieved.

This treatment was continued until both she and the babe were entirely relieved of their pains, and are now quite well. Constipation in the child was relieved by a small dose of glycerine warmed and given by enema once daily. I am fully convinced that this was a case of rheumatism of the bowels commencing from the birth of the child, which was relieved in a very short time by the administration of salicylic acid to the mother.

As an example of congenital infection of a different nature the author cites this case.

Jessie I., a primipara, had intermittent fever at the time of the birth of her daughter. The child had a decided chill and fever on the second day after birth, which was promptly relieved by minute doses of calomel and quinine given for several days to the child.

King (E. E.) on Early Facial Paralysis in Syphilis.—The occurrence of facial paralysis is by no means a rare event in connection with syphilis, but it is usually a late sequence, and ushered in with prodromata similar to other nervous affections, such as prolonged headache, a general dulness, etc. The case in point, however, developed suddenly.

Mr. T., aged twenty-four, consulted me on December 15, 1887, for a sore on the glans penis, which had developed rapidly. I made the diagnosis of serpiginous chancre, and it was with great difficulty that I succeeded in causing it to heal. He had the usual sore-throat and a very slight rash, but all the secondary symptoms were very slight, a fact I attributed to the early period at which the patient was put on specific treatment, to which he was very attentive for about three months, when he lost his position, and being out of money, neglected himself. I lost all track of him until July 18th, when he again presented himself with facial paralysis on right side, which had occurred on July 15th, just seven months from the time of the initial lesion. The attack came on quietly and without warning. He lay down to rest in the afternoon, and when he awoke the paralysis was complete in the ocular muscles, and by morning the whole face was involved. The pathological changes which may cause this trouble are either gummata, which occur late in the disease, thickening of the bone and its periosteum, which also occurs late, and the thickening of the walls of a blood-vessel, and the occlusion of one supplying some particular part, which was the cause, I believe, of the trouble in the present case. The cure rapidly followed the continued taking of hydrarg. perchlor. and potass. iodid. About August 10th he had again control of the facial muscles.—*Canadian Practitioner*, Sept., 1888.

Wholesale Dissemination of Syphilis.—Prof. Tarnowski, of St. Petersburg, says, that a syphilitic woman, who had come under the observation of the professor, had succeeded in contaminating with syphilis no less than 300 men within a period of ten months. This represents merely the primary transmission of the disease; it naturally takes no account of the syphilitic taint which would reach the offspring of the men who suffered. Thus from one source, that of an infected woman, an amount of syphilis was disseminated, and injury done to healthy persons, which it is scarcely possible to contemplate without horror. In commenting upon this case a French contemporary asks the pertinent question, "What is a mad dog in comparison with a *fille de brasserie?*"—*Med. Press*, Sept. 12, 1888.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of

CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital; CONDICT W. CUTLER, M.D., Instructor in Diseases of the Skin, Post-Graduate Medical School, New York; JOHN D. HAWLEY, M.D., Attending Gynæcologist, New York Hospital, Out-Patient Department; FREDERICK PETERSON, M.D., Lecturer on Nervous Diseases at the New York Polyclinic.

VOL. V., NO. 40. October 4, 1888. WHOLE NO. 88.

CONTENTS.

	PAGE
Surgery	473
Medicine	478
Pathology	481
Book Notice	484

SURGERY.

Verchère on Primary Union for the Rapid Cure of Fistula in Ano.—To exemplify his practice the author details an ordinary case. A man of twenty-nine presents himself with a complete fistula about four centimetres long. For three mornings before the operation a mild saline purge is given, and morning and night, and after each stool the rectum is washed out with a saturated solution of boric acid. Between the stools, a pad of iodoform gauze and a compress dipped in a 1–1,000 solution of sublimate is kept applied to the anus. On the morning of operation a bath is given.

The fistulous tract was laid open; the rectum was stopped high up by a tampon of iodoform gauze, and the anus held wide open by means of a large speculum. With toothed forceps and a bistoury, or, where that was impossible, with a sharp curette, the fistulous surfaces were thoroughly vivified, and the wound closed with an abundance of sutures. The sutures in, the rectum was thoroughly irrigated with a sublimate solution, and the soiled rectal tampon replaced by a fresh one, through which passed a rubber tube to allow the escape of flatus without infecting the wound. Iodoform gauze lubricated with boracic ointment was introduced into the lower part of the rectum, and a pad of absorbent cotton moistened with sublimate solution kept in place over all with a T-bandage. The patient was kept on the back, with the legs slightly flexed and approximated, and the catheter used when needed. The diet was dry and consisted chiefly of rare beef. A mild opiate was given, combined with an intestinal antiseptic. (Naphthol or iodoform.)

There was no fever, and when first examined, on the sixth day, union seemed complete. On the tenth day, after a free stool, the wound was perfectly and firmly united.

If a natural movement does not occur the author advises a mild saline purge or enema. If an evacuation occurs before healing is complete the bowel should be irrigated again and a new tampon introduced.—*La France Méd.*, Sept. 15, 1888.

Cotterill (J. M.). Fifteen Inches of Large Intestine Resected with Success in a Case of Umbilical Hernia.—The patient was an enormously stout woman, weighing 250 pounds, and was seven months pregnant. An umbilical hernia of some standing came down and could not be returned. Her medical attendant put on a firm binder, and sent her into the Maternity Hospital, under the impression that the child was dead, and that she was about to miscarry. On arrival there her condition was at once recognized, and she was transferred to the Infirmary. When admitted she was collapsed and *in extremis*. There was a large bright red tumor on the top of an enormous abdomen. An incision nine inches in length was made and the sac opened into. A gangrenous and burst intestine and gangrenous omentum were then found. The omentum, sac, and sloughs of cellular tissue were removed, and fifteen inches of gangrenous large intestine cut away. The two ends were left at the umbilicus, no attempt being made to unite them. The woman was got back to bed alive, and fed per rectum. Thirty-six

hours after the operation she gave birth with one pain to a child, which lived for several hours. Afterwards the woman made an uninterrupted recovery. She still defæcated at the umbilicus, but Dr. Cotterill hoped to remedy that by a second operation. The part of intestine removed was from the transverse colon.—*Edinburgh Med. Jour.*, Sept., 1888.

Polaillon on Dangers Attending a Toilette of the Peritoneum.—In reporting a case where a thirteen-pound tumor of the right ovary was removed, the author called attention to the fact that the washing out of the peritoneal cavity with warm water was not devoid of danger, and often causes the stoppage of respiration. In two of his cases the respiratory act was reëstablished with difficulty; in another, death from failure of respiration occurred. He thinks this action is due to the direct effect of the water upon the diaphragm or solar plexus, and that is more apt to occur when the water is hot.

He advises, first, that the patient be placed in a semi-recumbent position, with the chest more elevated than the pelvis, in such a way that the "lavage" may be confined to the pelvis and lower abdomen, no water being able to reach the diaphragm; second, that the irrigating fluid should never be above the temperature of the body; third, that the state of anæsthesia should be carefully watched at the time of "lavage."—*Le Praticien*, Sept. 3, 1888.

Garde (H. C.) on a Case of Lithotomy and Removal of Coin from Bladder of Same Individual at Different Time.—On May 29, 1884, a man of 45 was admitted into the hospital, suffering from the usual symptoms of stone, which, on passing the sound, was readily detected, and a few days after I removed a uric acid calculus, weighing 246 grains, by the lateral operation. Nothing unusual occurred either at the operation or during convalescence, and he left the hospital in good health on July 12, 1884.

On December 28, 1886, he was again admitted, suffering from symptoms of vesical irritation, and on making minute enquiries, the patient said that a three-penny piece was in his bladder. He was in a depressed state of mind, had tried to drown himself, and was brought in by the police. A couple of months previous he had some slight incontinence of urine, which he thought he could cure by passing a three-penny piece into his urethra; his idea was, that by placing the coin across the canal it would act as a valve, and prevent the urine from passing, and that when he wanted to micturate, by pressing it sideways, it would allow the urine to pass on either side, which it did in a forked stream. At first it answered his purpose fairly well, but soon began to get further into the urethra, until finally it slipped into the bladder, taking six weeks to perform the journey; so that when he was re-admitted the coin was in the bladder fourteen days. On passing the sound, the foreign body was soon struck, giving a clear metallic ringing noise, and verifying the man's story, which at first, from his state of mind, I was rather dubious of. Owing to the rarity of the case, a consultation was called, and it was decided to try and remove it with the lithotrite. On January 2, 1887, he was placed upon the table and chloroform having been administered, I passed the sound and made out the exact position of the coin, next passed the lithotrite (Bigelow's), and at the second attempt caught it, the blades were screwed up and the instrument withdrawn; owing to the fact of the patient's urethra being of rather larger calibre than usual, little or no laceration occurred, although more than half of the coin projected from the side of the instrument; a thin film of phosphates covered it, giving it a slightly roughened appearance. No bad symptoms followed, and he left the hospital four days after the operation.—*Australasian Med. Gazette*, July, 1888.

Marchant on a Case of Vicious Callus of the Fibula.—A young man injured his knee severely by falling from a horse. A fracture of the upper end of the fibula, and a backward dislocation of the tibia, were diagnosed, and the limb was kept in a plaster splint for forty days. When the splint was removed it was noticed that a certain amount of talipes was present, with lowered sensibility and motility of the leg, atrophy, and abolition of reflex action. Motility of the knee returned, but the foot remained paralyzed. An exploratory operation showed the nerve to be surrounded by callus, which was removed. The nerve at this point appeared swollen and congested. The motor and sensory troubles disappeared about seven months later.—*Le Courier Méd.*, Sept. 15, 1888.

Baker (D. E.) on Dislocation of Hip of Eleven Months' Standing;

Reduction by Manipulation.—A widow, nineteen years of age, entered the hospital September 14, 1883. In October of the previous year she had been confined, and eight days afterward left her bed and moved about the room. Three weeks after labor she began to have pain in the left knee, which later shifted to other parts of the body. In the course of another fortnight the pain had settled in the left thigh and increased in intensity. No constitutional symptoms had thus far appeared.

While lying on the sofa on the 25th of October, 1882, she felt severe pain in left hip and down the back of the thigh, which was far more acute than had been previously experienced. On attempting to get up and walk, the left leg gave way under her, and she fell to the floor, but was unable to tell how she struck. She was lifted into a chair, and from the chair carried to the bed, where she first noticed the tendency in the left knee to fall in and overlap its fellow. There was great pain behind and above the hip joint of that side when she attempted to rest on the left natis. The only relief obtained was by keeping the leg flexed and supported on a box under the knee, and the subcutaneous use of morphia every four hours. Chills, high temperatures, and profuse perspirations ensued. For eleven weeks she was kept under the influence of morphia much of the time. This was abandoned on account of its unpleasant effects. At the end of thirteen weeks she began to sit up, and a month later to go on crutches, with the limb flexed and the toe far from touching the floor. When she was beginning to get about there was an examination made under ether, and the opinion was expressed that the hip was out of joint, but no decided efforts were made to restore the bone to its place. For three weeks imperfect methods of extension were employed, such as suspending a weight from the foot over the end of the mattress when she was in bed, and allowing a weight to dangle from the left foot while she supported herself between two chairs in the erect position. One of her medical attendants had treated her for sciatica, and another for posible hip disease. The foot gradually came down so that at length the great toe rested on the ground, and the limb was used in walking. Two months before entering the hospital she dispensed with one crutch. The appetite had been poor, and the strength was easily exhausted, until the last three weeks before admission, when she made some gain in these respects, and could walk three fourths of a mile with but one crutch. The patient stated that she realized the severity of the operation to reduce the dislocation, but could not feel satisfied until the attempt had been made.

In the examination that followed her entrance into the hospital, it was found that in the erect posture the toes and ball of the left foot touched the floor. When lying on her back the left knee overlapped the right, and the left foot was inverted, the great toe overriding the opposite instep. The thigh could be slightly flexed without moving the pelvis, but flexion beyond a certain point tilted the pelvis and caused pain. The distance from the anterior superior iliac spine to the patella was one inch shorter on the left than on the right side. A straight line from left anterior superior iliac spine to left internal malleolus passed outside the patella. The left internal malleolus was apparently two and one half inches above the right. The tip of great trochanter on this side was one inch above Nelaton's line, and the same point was an inch farther from the anterior superior spina ilii on the left than on the right side. The head of the femur could be plainly felt on the dorsum ilii far back of the acetabulum. Under ether, the leg fully extended, the line from the left anterior superior spine of the ilium to left internal malleolus passed over the patella, and was one inch shorter than the corresponding distance on the right. The muscles were smaller on the left side than on the right. Grating was felt during the flexion of the thigh under ether.

In consultation, the surgical staff confirmed the diagnosis and advised the attempt at reduction. Accordingly, on September 21st, one week after admission, the patient was etherized for this purpose. While the pelvis was steadied by the hands of the assistants, Dr. W. H. Thorndike performed the manipulation. The thigh was flexed, adducted, circumducted outward, and rotated, and the manœuvre repeated twice, when a marked thug was perceived, after which the leg was lowered to the table. On raising the leg the head of the bone appeared to be somewhat below the joint, whereupon the operator placed his arm under the knee, with the thigh slightly abducted, and forcibly jerked the latter upward, when a second thug was detected, and the normal movements of the limb

could then be performed without any resistance.

A mass of indurated tissue was found behind and above the acetabulum, where the head had rested, but the marked prominence of the latter had disappeared. With the limbs extended, the patellæ were opposite, but semiflexion of the thighs made the left femur appear about one inch shorter than its companion. This might be accounted for by the smaller glutei of the left side, an original difference in length of the femora, or by absorption of the left cervix femoris. In flexing the thigh on the pelvis, the head grated somewhat in its new but old position. Measuring from the ilium to the patella, one fourth inch shortening was obtained, but between the ilium and malleolus no disparity was demonstrated.

The knees of the patient were bound together and morphia given subcutaneously during the paroxysm of pain, which occured during the first night after the operation. She slept between two and three hours. In twenty-four there was marked ecchymosis with swelling, and tenderness of the thigh and intermittent pain. For the next few days laudanum fomentations were applied about the hip and thigh, and the ankles and knees were bound together.

The temperature fluctuated between 99° F. to 102° F. for three days, and the pulse from 100 to 120, then gradually both declined. A week after the reduction the legs could be flexed to an angle of 45° without much pain to the patient. At the expiration of a month she could walk without crutches by taking the hand of her nurse, but this gave her considerable pain. The subsequent improvement was rapid and recovery complete.

Three years after the operation she writes that her health was never better, and that the hip is all right. The limb is a trifle short, but there is no limping to speak of, and the only pain is a slight rheumatism if she gets cold.—*Boston Med. and Surg. Jour.*, Sept. 6, 1888.

Le Bec on Ulceration of the Radical Artery in Contact with a Drainage Tube.—The patient was a woman of 42, with an immense abscess of the forearm, which originated from a felon on the little finger. The collection of pus filled the palm of the hand, and extended up the forearm to the elbow. After opening the phlegmon one drainage tube was introduced into the palm of the hand, and another up to the upper third of the forearm. Antiseptic irrigations were practised three times a day. Towards the end of the third week a sharp hemorrhage took place from the upper wound. Compression stopped it. The next day it recurred, and ligation was decided on. The wound was enlarged, and the vessels found with the drainage tube lying along side of them. Inflammatory adhesions rendered it impossible to separate the vein and artery, so they were ligated above and below the point of hemorrhage, which was seen to come from an opening in the artery 5–6 mm. long, involving half the calibre of the artery. The edges of the orifice were swollen and irregular. The ulcerated area corresponded to that part of the artery in contact with the drainage tube.—*La France Méd.*, Aug. 30, 1888.

Syme (G. A.) on a Case of Loose Body Removed from the Elbow Joint, Presumably Due to Fracture of the Head of the Radius.—A male of 22 stated that about five years ago, after a light wrench, his right elbow became very painful and swollen, so that for rather more than a week he was unable to use it. Prior to this he had never had any trouble with the joint whatever. He was attended by a medical man, who said the joint was inflamed. He soon recovered complete use of the arm, and felt no further inconvenience until Christmas, 1886, when he injured the same arm in the following manner: While holding up the shafts of a heavy dray, it overbalanced, and he was thrown violently to the ground on his back. He retained his hold of the shaft in his right hand, keeping it supported off the ground, and felt a strong "jar" in the right elbow, which rested on the ground. The joint became very painful, and he found he could neither straighten nor fully bend the arm, and when he did attempt to straighten the arm, a "lump" appeared on the outer side of the joint, but disappeared on his touching it. The medical man who attended him, strapped the joint, and said he had a loose cartilage. The lump reappeared as soon as he began to try to use his arm, and caused him great pain.

An appliance to keep the "lump" in place gave no relief, and now he can hardly use the arm at all.

On examination the right arm was found much wasted, especially the upper arm. Flexion and extension were limited, espe-

cially extension, also rotation of the radius; while the head of the radius did not move in the usual manner, but gave the impression of being displaced, although I was unable to make out the form of the displacement. By a peculiar sudden movement of extension at the same time that the supinator longus muscle was strongly contracted, the patient voluntarily caused a movable body to protrude on the outer side of the joint, below and very slightly in front of the external condyle. The slightest manipulation of this made it disappear. It was obviously a loose body, and I advised its removal, though not very sanguine of effecting very much improvement in the motion of the joint.

From the history he gave of previous inflammation in the joint, and the nature of the accident, I thought that the body was probably an hypertrophied fringe of synovial membrane that had become pendulous, and then been detached by the injury.

Having rendered the limb bloodless, I injected cocaine snbcutaneously over the site of the body, and this being protruded by the patient (who was not anæsthetized, in order that he might assist in protruding the body), I endeavored to transfix it with a strong hare-lip pin. Unfortunately, as soon as it entered the body, the pin broke off short. I then cut straight down, but the moment the knife reached it, the body slipped away. The patient again protruded it, and I enlarged the incision, at the bottom of which appeared the apparently normal head of the radius, but no loose body, although the patient insisted that it was protruded. I examined with my finger, and to my surprise the head of the radius disappeared. I dissected a little further, and told the patient to again protrude the body. He did so, and out it shot. Cursorily examining it to see that all the rest of the hare-lip pin was fixed in it, I, satisfied on this point, immediately began to close the wound, as the effects of the cocaine were passing off, and unfortunately omitted to examine the condition of the head of the radius, an omission for which I now blame myself severely. A deep catgut suture was passed through the incision in the synovial membrane, the wound closed and dressed with perchloride of mercury gauze and salicylic wool, and the arm placed on a splint. With the exception of a small superficial abscess round one suture, there was no disturbance, and the wound healed by first intention. Passive motion, massage, and faradism were commenced in about ten days, and the patient returned to his home at St. Arnaud in about three weeks, with improved though impaired motion, but free from all pain, and able to use the limb. He was treated as an out-patient during the whole period.

On carefully examining the specimen, the conclusion was forced on me that it was a portion of the head of the radius, separated from the rest of the bone by an oblique fracture running downwards, and slightly outwards, the section revealing that it consists of true bone covered on its (presumably) upper and outer surfaces by articular cartilage, and on the other surface (presumably the line of fracture) by fibrous tissue.—*Australian Med. Jour.*, July 15, 1888.

Christie on Amputation of Penis under Cocaine.—Having a case of epithelioma of the penis in a Tartar patient, and finding that after a few inhalations of chloroform the man was a bad subject for a general anæsthetic, the writer decided to try cocaine. Twenty minims of a 5 per cent. solution of the hydrochlorate were injected in five-minim doses at short intervals round the seat of incision, and a quarter of an hour after the first injection the operation was performed without the patient giving the slightest evidence of pain. Another point of interest is that, except from the larger blood-vessels, there was hardly any hemorrhage, doubtless due to the constricting effect of the drug on the capillaries. No bad effects followed. The anæsthesia produced lasted over a day; indeed, the patient made no complaint of pain after the operation. He is stated to have recovered without a bad symptom, and now to enjoy excellent health.—*Lancet*, Aug. 25, 1888.

Lee (H.) on Results after Twenty Years of Two Cases of Excision of the Knee Joint.—In the first case there was perfect use of the muscles of the leg and foot, but there was nine inches shortening. In the second case the limb was six inches shorter than the one on the opposite side. Flexion and extension of the joint were perfect in walking. There was no lateral motion.—*Lancet*, April 21, 1888.

J. R.

MEDICINE.

An Undescribed Arterial Murmur.—Under the above heading Dr. H. H. Seelye describes, in the *Medical Record* of September 5, 1887, systolic murmurs which he has heard over the subclavian and sometimes over other large vessels in a large percentage of students in Amherst College, and states that he has never seen or heard any reference to it. The great majority of the subjects were apparently in perfect health.

As a matter of fact, the subclavian murmur has been much discussed, and possibly the reason why the doctor has never heard it mentioned in his hospital and college experience is that other observers have reached the same conclusion that he has, viz., that the murmur is of no practical significance. Of easily accessible authorities may be cited Loomis, who mentions the subclavian murmur in his work on "Physical Diagnosis," and Sansom ("Physical Diagnosis of the Heart"), who speaks also of arterial murmurs as occurring during health, slight pressure with the stethoscope being necessary to develop them. The left subclavian is the vessel over which the murmur is loudest, both in Dr. Seelye's experience and in that of other observers.

Dr. Seelye's examinations were made in a gymnasium before and after *violent* muscular exercise, the murmurs being loudest under the latter condition. This probably accounts for the striking contrast between the doctor's previous hospital experience and his later examinations. It is customary enough for an examiner to have a patient walk about a room, but few have their patients dip "up and down between two parallel bars until completely exhausted." It may therefore well be that few observers have heard such frequent and widespread murmurs of this variety as has Dr. Seelye.

R. VAN SANTVOORD, M.D.

Pamponkis on an Experimental Study of Sea-Sickness.—The experiments of the author upon animals are of great interest, but too extended for reproduction in detail. From them and from a study of sea-sickness in man, he concludes that the disease depends principally upon an unnatural movement of the abdominal viscera, which in turn disturbs respiration, circulation, and innervation. He thinks that neuropathic, anæmic, and dyspeptic people are most apt to suffer.

He lays down the following rules for prevention and treatment. Before embarkation the belly should be tightly compressed by a long and tight bandage with a view of preventing, as much as possible, unnatural and disturbing visceral movements. Little nourishment should be taken, especially liquids, the idea being to lower blood pressure and secretions. By no means, however, should two or three "petits verres" of brandy a day be omitted. Should sickness be felt coming on, the victim should lie down and take a little cocaine, which will prevent the nausea, but not the vertigo.—*La Thérap. Contemp.*, Sept. 7, 1888.

Finlay (D.) on Epileptic Insanity.—In a thesis on the above subject the author concludes that: There is a very close relationship between epilepsy and insanity; the nervous disorder is not confined to the higher centres exclusively; the ganglionic centres in the cord are involved, as indicated by the alterations which occur in the deep reflexes; albuminuria is frequent in the epileptic insane, irrespective of the occurrence of convulsions; phosphates and urea of the urine are habitually deficient. Of the remedies employed, most reliance is to be placed on the bromides, but borax acts in some cases where the bromides fail. —*Glasgow Med. Jour.*, Sept., 1888.

The Breeding of Paupers and Criminals.—At the recent Prison Congress, Mr. C. H. Reeve, of Plymouth, Ind., read a suggestive paper on "Dependent Children," which went deeper than the very obvious question of their support and rearing. In regard to the existing conditions, he said that the origin of a majority of the most undesirable of these children exists in an erroneous and perverted view, by both State and Church, of what constitutes a true marriage, producing a vicious civil and canonical legislation that encourages and sanctions their production, thereby constantly widening the planes of pauperism and crime.

"The mass of dependent children is largely made up of foundlings, illegitimates, children abandoned by worthless parents, orphans of the very poor, with a few better born who become waifs from various causes. In the cases of nearly all of them except the last there is more or less mental deficiency, or deformity in the brain substance, or the conformation or arrangement of brain ganglia.

"Statute law makes marriage a civil contract—a matter of dollars and cents. No matter who comes for a marriage permit—the strong or the weak-minded, the sound and healthy or the deformed and constitutionally diseased, the millionaire or the hereditary pauper, the moral and orderly or the vicious and confirmed criminal, the progenitor of statesmen or of idiots, the sane, or the hereditary insane if favored with a lucid interval, the temperate or the besotted—all are given a permit alike. The revenue is collected, the ceremony authorized, the record made, and this civil contract is fully completed by sanction of law! If a man wants to run a locomotive engine, or practise medicine (elsewhere than in the United States), or plead in the courts, or stand in the sacred desk and talk theology, or teach a school, or run a pilot-boat, or even to secure a petty clerkship under government, he must submit to a rigid examination as to his fitness for the position and its duties, and be able to pass one. But when one comes forward to get a permit to enter into a contract that places him under obligations and demands of him duties that are the most important, the most responsible, the most sacred that can be assumed anywhere between the cradle and the grave, that vitally affect the bodies social and politic as well as corporal, now existing and hereafter to exist, directly and indirectly, not a word is said. All are licensed."

Not very long ago the public was admonished by a consul of the United States that a lawful marriage in the United States was not necessarily binding in France as between a Frenchman and an American. It seemed shocking, but looking at our marriage system as here presented, there is certainly much to be said for the French views of the subject.

Mr. Reeve does not consider the Church blameless in the matter. "It regards marriage as a holy, sacramental covenant. By permission of law its ministers ceremonially aid the parties in making this holy covenant, which, at the same time involves the statutory civil contract. It makes little or no inquiry as to the candidates. (One organization may as to belief in a creed.) It looks only for a license and the fee in prospect. Even in the shadow of the prison wall and of the gallows, its ministers, in sacerdotal robes, have united criminals. Thus is it *sanctioned by the Church!* What a shocking view is before and around us when we see the public opinion, both legal and social, upholding these conditions! Government maintains a bureau and employs scientific experts, regardless of expense, to hunt out and kill diseased horses and cattle; invades anybody's premises for the purpose, and makes it a crime for the owner to resist. But when a viciously diseased man or woman applies for a legal permission to taint whole generations, it asks no questions, extends no protection for individuals or the public, but grants the permit.

"What must follow and does follow this universal misuse and abuse of knowledge and liberty? Plainly, the constant and rapid peopling of the planes of pauperism, idiocy, and crime, and the steady widening of those planes; physical and mental disease and deformity; the evolution of new forces that pervert the correct views of a true humanity, and tend to destroy moral perception."

Mr. Reeve made certain suggestions concerning the care of these little unfortunates, and then went on to say that "with the statutes providing for homes and training-schools, there should be others looking to the prevention of pauperism and crime by preventing the production of paupers and criminals, and especially their production under the permission and sanction of the State laws and social usages.

"It is a greater evil to bring into life a child on the plane of hereditary pauperism, or in the line of successive criminals, than it would be to adopt the theory of Malthus, confining it to those planes. There is as much wrong in bringing into life a child with insane parentage as there would be in driving a sane child insane by cruel and brutal usage. There is more wrong in bringing into life a child without legitimate parentage than there is in child-stealing for the purpose of professional beggary.

"Let us hope that, slowly but surely, the knowledge will obtain that marriage is not romance, but the very highest order of business, requiring more deliberation, more care and forethought, and entailing more responsibility than any other act known to humanity. That government will recognize that it has no greater obligation resting upon it than to see that none have its license to enter into a contract of marriage who are unfit for its relations and duties, so far as human foresight and legal pro-

visions can prevent, and proper inquiry can prevent in most cases, if it be aided by sufficient penalties."

It is a hopeful view of the power of law to suppose it can so regulate the marriage relation as to put an end to the breeding of criminals, paupers, and insane. Careful regulation of marriage has not been so successful in countries where the regulations are most strict as to warrant any very great reliance on it; and surely it would be a curious condition of affairs to forbid the rearing of criminals at home while we import them so freely from the Old World, but the condition described in the article we have so freely quoted is one that deserves recognition, and if laws can but imperfectly control the matter, such statements will certainly help to awaken public knowledge upon the subject.—Edit. *Boston Med. and Surg. Jour.*, Aug., 1888.

Self-Mutilation by the Insane.—A most remarkable instance of the domination of this instinct has occurred in Dublin within the last week in the case of a medical student named Gannon. This victim of the self-mutilation impulse was found in a field with a handkerchief applied to his eyes, which were streaming with blood. He was brought to the hospital, where it was speedily ascertained that both his eyes had been torn out, and, on searching for the extirpated organs, they were found lying on the grass in the field in a very perfect condition, though one of them presented the appearance of having been trodden on. With reference to the mental condition of the poor fellow, it is sufficient to state that he was for some time previous to the occurrence under surveillance, and that he is now, since his admission to hospital, in a state of more or less acute mania. No sufficient explanation of the reason why he should be the subject of this particular form of insane impulse is forthcoming, but it may be mentioned that he was recently at work "making up" the study of the eye (and doubtless the anatomy of enucleation) for a coming examination. The form of impulse is not by any means unprecedented, for several cases are recorded, and, at the same time, the mania for self-mutilation of this sort became a sort of religious fanaticism in Russia. A case was reported by Mackinlay to the Ophthalmological Society on the 5th May, 1888. A woman, æt. 39, had borne many children rapidly, and had nursed them freely. At the time of mutilation she was suckling a baby three months old, and was in fairly good health until three or four days before, when she became strange, and read her Bible very much. On the day of the occurrence, when her husband returned home, he noticed the eye tied up, and elicited the fact that she had removed her eye as the Bible directed, and she stated that she had done it with a meat-hook. The nerve was severed so far back that it could not be felt at the foramen. The patient made a good recovery, and went to an asylum for a few weeks, when she returned to her home. Search was made for the eye, but it could not be found, nor was it ever known what she did with it. Even in Dublin the case is not without precedent, for an instance occurred a few years since in which a girl, being arrested and committed to a police cell in a state of furious drunkenness, tore out both her eyes, and we believe she is now an inmate of a "home" in the neighborhood of the city. Astonishment is caused rather by the fact that a person unskilled in manipulations of the sort, and in the anatomy of the parts, should be able to remove the eye-globe without instruments, notwithstanding the excruciating pain suffered in the process, and despite the fact that one eye being lost, he was absolutely blind during the removal of the second one. It does not appear that in this case the victim used any instrument but his finger-nails, for we believe that the lids and neighboring structures showed no sign of the use of a penknife or any such implement. It is, indeed, not very difficult or unusual to dislocate the eyeball forwards by a blow delivered beneath the lower lid. In such case the eye-globe is forced forward and the lids close in behind it, and when this occurs, it would not need a very great degree of additional violence to break the muscular attachments and extirpate the eyeball altogether. This would seem to have been probably the process in the present case, for one of the optic nerves which remained attached to the globe was of considerable length, as if it had been forcibly dragged forward before it gave way and broke off. Naturally there was much apprehension on the part of the surgeons in charge that such an injury might result in an inflammation of the brain, but nothing of the sort has taken place, and we understand that the patient is going on as well as possible.—*Medical Press*, Sept. 12, 1888.

Vergely on Occipital Headache.—As a result of his observations the author concludes that pharyngitis, acute or chronic, hypertrophic, atrophic, or granular, whether localized in the buccal or, as occurs more often, in the naso-pharynx, is accompanied by pain seated in the occiput, either about the curved line of the occipital bone, the points of emergence of the occipital nerves, the nucha, or the posterior part of the mastoid processes. On the other hand, when either the Eustachian tube, the middle ear, or the tympanum is the seat of inflammation or variations of tension, the pain is located in the concha, the tragus, or the squamous portion of the temporal bone, or the temporo-malar region; while if catarrh reaches the nasal fossæ, the frontal or sphenoidal sinuses, the pain has its seat at the root of the nose, or in the supra or suborbital region.

When tender points are found about the occiput, nucha, or mastoids, even if the patient complains of no pain or pharyngeal trouble, the buccal and naso-pharynx should be carefully examined. The author holds these pains to be of a reflex nature and, except in hysterical, alcoholic, or neurasthenic cases, very amenable to local and general treatment.—*L'Union Méd.*, Sept. 4, 1888.

PATHOLOGY.

Malins (E.) on the Presence of Air in Suppurative Swellings of the Abdomen.—A woman of twenty-six, married six years, no children, no miscarriages, gave a history of four months' illness, with abdominal pain and prostration coming on suddenly and accompanied by metrorrhagia and retention of urine. There was a central swelling in the lower abdomen, reaching to just below the umbilicus, in the hypogastric and part of the two iliac regions; it was rounded, smooth, tender, and elastic to palpation, but distinctly *resonant* all over on gentle and as firm percussion as could be borne. The bladder was emptied by a catheter, when by the vagina and by the rectum bimanually a definite tumor could be recognized surrounding the uterus, which was below and in front. Temperature 103°; pulse 126; tongue red and dry. There had been no rigors or sweating. The diagnosis was suppurating hæmatocele. An incision was made in the middle line of the abdomen; this was deepened and the edges picked up with forceps. As the sac was opened carefully, there was a distinct escape of air, which "fizzed" out for an appreciable time. Nearly two pints of very fetid pus were evacuated, along with a number of flakes of decomposing lymph of various sizes. The space was thoroughly washed out with warm water and a glass drainage tube put in. The good effects were immediate, and, allowing time for so large a cavity to close, the patient made ultimately a satisfactory recovery.

A woman of thirty-five was continued on Dec. 27, 1887, after an interval of seven years from the birth of her last child. There was some adhesion of the placenta, necessitating the introduction of the hand for its removal. She developed from the first a high temperature, quick pulse, and marked feebleness. After the continuance of bad signs for about ten days, there formed a well-marked phlegmon in the right broad ligament; it remained for some weeks, gradually decreased in size, and, subsiding, left some thickening only in its place. Still the temperature kept high, especially at night, with restlessness and want of sleep. There were profuse perspirations, quick pulse, and some ill-defined pain in the right iliac fossa; no shivering. After several weeks, with various exacerbations, there appeared a swelling in the right iliac region extending into the pelvis towards the uterus. Bimanually this could be felt to be a mass above the broad ligament, the latter being apparently free. Externally it was smooth, rounded in shape, *resonant all over*, the resonance being continuous with the cæcum. It became more prominent, and a hypodermic needle pressed into it deeply, showed that it contained pus. I opened it on March 17th. After cutting down to the limiting parts, a small opening was made, through which air distinctly escaped; so much so that I thought the intestine was opened, and that perchance it was in front of the tumor. But on carefully enlarging the aperture, exit was given to about six ounces of thick pus. The cavity was washed out with a solution of mercuric perchloride (1 in 2000) and an elastic drainage tube put in. It is interesting to note that the temperature at once fell to normal, from having been constantly elevated, at times considerably so, since the date of the confinement. It never reached above the

natural standard subsequently, and from this stage, after a lingering illness with exciting alternations of hope and fear, the patient made uniform progress, and became rapidly convalescent.

On August 4, 1887, at the General Hospital, I opened in the median line a central swelling of the lower abdomen, which from the history I thought probably arose from a ruptured cyst setting up localized peritonitis. The patient was a girl of sixteen. The swelling was limited in extent, smooth, pyriform in shape, with the base upwards, and occupied the hypogastric region to within an inch of the umbilicus; so central and defined in shape was the collection that previous to her admission the girl was suspected of being pregnant. Still the history was inflammatory, though there was suppression of the catamenia. It was tympanitic all over, the resonance appearing to pass into the surrounding intestine, or to be the effect of intestine in front. On opening the swelling, exit was given to a pint and a half of fetid pus, an evident rush of foul air being extruded from the first entrance into it. The exact cause was not found, owing to the matting together of intestines around. The space was washed out with a solution of boric acid and water, and a drainage tube put in. The patient made a good recovery.

A girl of eighteen had an abdominal tumor thought to be ovarian. There was a strumous history, with pain, fever, and emaciation for several months, during which time the swelling appeared. The abdomen was resonant all over, but on careful palpation a swelling could be made out in the hypogastric and part of the left iliac regions, and reaching nearly to the level of the umbilicus. On March 22, 1887, I opened it, the first incision giving vent to gas distinctly. About a pint of purulent fluid was let out. The cavity was washed out as before, a glass drainage tube being put in. Suppuration continued for some months before the opening closed, but the patient eventually did well.

In explanation of these cases the author has two theories: first, that the decomposition of pus and consequent evolution of gas are excited by the passage of bacteria of decomposition from the intestinal tract through the gut; or, secondly, that, to use his own words, "there is nothing between a woman's peritoneal cavity and the external air. From the vagina to the uterus through the Fallopian tubes, the tract is continuous, and under certain conditions the component structures forming this tract lose their tone, become less resisting, and practically offer no barrier to the entrance of air. The admission of air allows of decomposition, gathering strength as it passes along a surface, perchance reeking with all the necessary organisms for evil, and most readily affording a basis for the manufacture and introduction of elements which, finding a congenial sphere, multiply and act in a manner after their kind. If this is so, and I see no reason to doubt the validity of the circumstances I have named, we gather an explanation which admits of being tested by clinical observation."—*Lancet*, Sept. 15, 1888.

Murray (R. D.) on Perforative Peritonitis Caused by Round Worms.—A male, aged sixteen, was admitted to the lunatic asylum on March 17, 1883, suffering from acute mania. On October 4, 1884, he was admitted to hospital, and I find the following notes in the case-book: "Refuses food; restless; makes no complaint of pain; no diarrhœa; no vomiting; passed several round worms. In the evening very ill; pulse failing; fever; vomiting; some round worms thrown up; abdomen tympanitic. On October 5th he sank, and died suddenly at 7 P. M. A post-mortem examination was held at 8 A. M. on October 6th, and an ulcer the size of a sixpence was found about the middle of the jejunum with ragged margins and some thickening and congestion around it. About two inches higher up there was a second smaller ulcer, extending through the mucous coat only. The contents of the intestine and five round worms had escaped into the peritoneal cavity.

A male aged forty-three was admitted to the asylum with dementia, in October, 1870. On the morning of September 29, 1887, he was brought to the hospital with colic, became rapidly collapsed, and died at 7.30 the same evening. On post-mortem examination next morning, there was found to be an ulcer of the small intestine, perforating the walls, through which seventeen round worms had made their way into the peritoneum. The other organs were not apparently diseased.

A prisoner, aged forty, died suddenly in the gaol, in 1876, in a state of collapse, supervening on vomiting, diarrhœa, and intense abdominal pain. Post-mortem ex-

amination revealed recent peritonitis. A dead round worm five inches long lay in the peritoneal cavity. There was an aperture about as large as a three-penny piece, with clean-cut punched-out-looking edges in the lower third of the ileum. The tissues immediately around the opening were deeply congested. Two large round worms were found alive in the small intestine and one in the stomach. The perforation was not the result of ulcerative disease. The hole in the gut was circular and ring-like, and quite unlike any solution of continuity from disease. The mucous membrane of the alimentary canal was throughout healthy, and presented no trace of tubercular or other disease. I believe, then, that death was undoubtedly caused by the worm perforating the bowel.

As a result of my own observations in this country, I have no doubt whatever that the round worm is capable of causing perforation of the bowel, and actually boring its way into the peritoneum. Considering the great prevalence of these entozoa in Eastern countries and among the dark races generalty, the mortality caused by them is, in all probability greater than is usually supposed. In cholera times they are frequently a predisposing cause of the disease.—*Lancet*, Sept. 1, 1888.

Murphy (P. J.) on a Case of Purulent Peritonitis in an Infant 13 Days' Old.—Female mulatto infant, died March 24, 1888, æt. 13 days. It was well up to 7th day when œdema and redness of right labium major were noticed. The next day the swelling had extended to the lower right limb; and the next, up the back. On the 12th the abdomen was distended. A catheter passed into the bladder found it empty. The child nursed till the 12th day. No fever, dyspnœa, convulsions, or head symptoms were present.

The post-mortem examination showed large livid spots over the body; the right labium still swollen and red; the other swelling had disappeared. The umbilical vein contained a normal blood-clot. Lungs slightly congested. Abdomen filled with slightly bloody serum, and with pus and fibrin. The peritoneum everywhere congested. Kidneys congested. Pelves capacious.

Inasmuch as purulent peritonitis in infants is usually septicæmic in origin, it is probable that the swelling of the labium, etc., was infective.—*Jour. Am. Med. Ass'n*, Sept. 1, 1888.

Murray (R. W.) on Cerebral Hemorrhage in a Child Aged Nineteen Months.—A girl, aged nineteen months, was admitted on April 17, 1888, for a subcutaneous nævus over the upper part of the right lumbar region. She was a well-developed, healthy-looking child, and never had any previous illness. There was no history of syphilis.

On April 17th the nævus was incised, and two days later she contracted scarlet-fever. During convalescence from scarlet-fever (May 6th) there was a sudden rise of temperature (104.8°); no convulsions; in fact, there was nothing definite to account for the rise. A few days afterwards there were symptoms of peritonitis, with a rapid respiration, swollen and tender abdomen, and knees drawn up. The temperature remained high, and the symptoms of peritonitis continued. The child gradually sank, and died on May 25th. At 3 A.M. on the morning of death she had a sudden attack of right-sided convulsions.

A post-mortem examination was made on May 27th. The lungs and heart were found to be normal. Abdominal viscera healthy, and no trace of peritonitis, old or recent. There was venous congestion of the anterior one-third of the outer and under surface of the brain on the left side, and on examining the under surface a clot was seen occupying the anterior part of the left temporo-sphenoidal lobe, but not quite coming to the surface. On making sections through the clot, it was found to be firm, of a dark-red color, of the same consistence throughout, and about the size of a walnut, occupying the fore part of the middle and superior temporo-sphenoidal convolutions; the limitation of the clot was very distinct, and the brain substance around was firm. It was apparently of recent origin. The left lateral sinus was filled in the posterior two-thirds by an organized clot, obviously of some age; a recent post-mortem clot occupied the rest of the sinus. The right lateral sinus was much dilated. To the reporter it seemed probable that on account of the bad drainage (the lateral sinus being blocked), together with the increased blood pressure (for there was marked albuminuria), a vessel gave way.—*Lancet*, Sept. 1, 1888.

Caldwell (R.) on a Case of Syphilis Presenting Some Unusual Appearances.—A private was admitted into hospital suffering from a syphilitic chancre

on the glans penis, which was in an acute state of inflammation from neglect and dirt. The man was an anæmic and scrofulous-looking subject. There was a row of painful glands in each groin, and a commencing syphilitic rash about the arms and chest.

The buboes suppurated shortly after his admission to hospital, when they were opened, and instead of healing speedily, took on an exceedingly unhealthy action, sprouting into large granulations, which in their appearance resembled papillomatous tumors. The whole of the glans penis also became covered with similar kinds of growths, and now presented a most remarkable appearance. Various escharotics were applied, among others strong nitric acid, which, however, had no beneficial effect whatever. The growths were then removed with the knife, and strong nitric acid again employed, but in a few days the growths had once more sprouted into their former luxuriance. The operation was again performed with a similiar result; in spite of the fact that every care and precaution were exercised to prevent the recurrence of the growths, they nevertheless shortly afterwards recurred. A slight abrasion of the cuticle on the left thigh, which was the result of an accident, immediately took on the same kind of action, and sprouted into large granulations, extending almost an inch from the surface of the limb.

During the whole of the treatment patient was kept on a most liberal diet, with a plentiful supply of tonics and cod-liver oil, but although the secondary rash disappeared with anti-syphilitic remedies, he failed to make any other kind of improvement, nearly every escharotic having been tried without any permanent benefit whatever. The glans penis was simply one mass of protuberant unhealthy growths, extending on the under surface almost halfway to the root of the organ. The orifice of the urethra had apparently disappeared, and its locality could only be detected during the act of micturition. The end of the organ was almost as large round as an ordinary man's wrist.

I at length resolved to apply sulphuric acid (strong) and charcoal to the sores in the groins, which I accordingly did. The pain cause by the application was excessive, and I was forced to proceed very slowly with the treatment which succeeded, however, admirably, and on the separation of the scabs, fairly healthy ulcers were exposed to view. These, however, evinced a slight tendency to sprout, which was however restrained by the daily application of nitrate of silver. They were all syringed with carbolic lotion, and dressed with iodoform and boracic ointment. This treatment was not carried out with regard to the end of the penis, which was touched once more with nitric acid, and dressed with iodoform. He was treated internally with cod-liver oil and syr. ferri iodidi. The sores in the groin now commenced to heal rapidly, and the man in consequence gained considerably in strength.

The patient can now leave his bed, which he had been unable to do for months. The groins are almost healed, and the ulcer on the penis is doing so as rapidly as his weakly state will allow. He is shortly to be discharged from hospital.

The points of interest about this case are that other sores on his body, caused by accident, and in no way connected with the primary chancre, took on with an equal willingness the same kind of action as was noticed in the groins and on the penis, and also that the ulcerated glans, which from the beginning had given the most trouble, commenced to heal as soon as the strain on his system caused by the open sores in the groin had been removed.—*Med. Press*, Sept. 5, 1888.

BOOK NOTICE.

The Physician's Interpreter is the best book on the subject that has come under our notice. From the German patient, seen for the first time while yet a student, on to the present, much valuable time has been given to solving the question how to gain a practical vocabulary of phrases for dispensary work among the poor foreign elements of our city. So far the only method found was the slow and questionable one of constructing by means of grammar and lexicon a set of phrases of one's own. These were more often found useless and unintelligible than otherwise. But books of the nature of this one are still rare. One only that we have found in searching through the foreign book stores and medical departments of the other leading publishers of the city, was of the most rudimentary and disappointing character. One can only wish it larger, and the binding so arranged as to remove sections for study in the horse-cars and in the dispensary. While in private practice, Spanish might have proved more frequently useful, we are confident the choice of Italian as the fourth language was a wise one. The numbering of the phrases and the plain practical index will greatly add to the usefulness of a book which we hope may have a wide circulation. The book is published by F. A. Davis, Philadelphia, Pa. A. T. M.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of

CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital; CONDICT W. CUTLER, M.D., Instructor in Diseases of the Skin, Post-Graduate Medical School, New York; JOHN S. HAWLEY, M.D., Attending Gynæcologist, New York Hospital, Out-Patient Department; FREDERICK PETERSON, M.D., Lecturer on Nervous Diseases at the New York Polyclinic.

VOL. V., NO. 41. October 11, 1888. WHOLE NO. 89.

CONTENTS.

	PAGE
Leading Article	485
Occasional Report on Diseases of the Nervous System	486
Occasional Report on Diseases of the Testis and Scrotum	489
Miscellaneous	492

LEADING ARTICLE.

The Treatment of Rheumatic and Septic Endocarditis.—One of the most important questions in the treatment of rheumatic endocarditis is the extent to which it is prevented or controlled by the salicylates, and it is a question to which it is very hard to give a definitive answer. It is, however, unfortunately true that these agents are capable, like most other drugs, of cutting both ways, and that the advice given with reference to these drugs in a recent article on the treatment of valvular diseases of the heart, viz., that "free and continued use" of them is important in rheumatic endocarditis, needs qualification. While there is, of course, no doubt that the salicylates have a specific action in the control of the rheumatic poison, it is also unquestionable that sometimes they exert an unfavorable influence on the general nutrition. It is the writer's experience that the results obtained from these remedies, including salol, are much more satisfactory in private than in hospital practice, the reason probably being that the hospital patients are, as a rule, cachectic, and the private patients in good general condition, when they come under treatment. Anæmic women frequently are unable to retain a single dose of salicylate of soda. Salol seems to be better tolerated.

Specific remedies in general seem to act rather as aids to the tissues in resisting toxic agencies, than as self-sufficient antidotes. When a uterus containing decomposing matter is washed out with a disinfecting solution, and the patient, previously suffering from putrid poisoning, is relieved of her symtoms, what has probably been accomplished has not been the complete and absolute cleansing of the organ, but a reduction of the offending material to so small an amount that the tissues are able to resist the residuum. If too powerful an agent is used, one which, while attacking the toxic agents present, diminishes at the same time the vitality of the tissues, the bacterial hordes are given an opportunity to recruit their forces, and may overwhelm the patient before the neighboring tissues have sufficiently recovered to offer effective resistance. Something of this sort seems to happen in cachectic rheumatics treated with salicylates. The acute symptoms are quickly controlled, but the patient loses appetite and becomes weaker and paler. If the specific medication is stopped, back come the joint pains. The drug, while holding in check the specific poison, is also reducing the resisting power of the tissues, so that when, by the withdrawal of medication, the combat is allowed to be renewed, the weakened tissues still find themselves unable to cope even with a crippled enemy. Finally the specific medication has to be withdrawn, and, by tonic treatment, the patient is so strengthened as to be able to throw off the disease without further assistance. In such a case in all probability the ultimate condition of the patient would have been better had the disease been allowed to run its course without any medication whatever, with only rest and good nursing. In this way also the too free use, even in robust patients, of

the salicylates may be harmful. The prolongation of the case renders the probability of the development of endocarditis greater than it otherwise would be. The weakening of the heart muscle leaves it less able to cope with valvular defects, if they occur. There is also the possibility of the development of relative insufficiency of especially the mitral valve from the cardiac dilatation which often accompanies anæmia. This may give rise to the false belief that permanent injury has been done, when, in fact, this is not the case. Regurgitation which exists by reason of valvular defect may of course be rendered greater by dilatation of the valvular ring, and a valve lesion which, but for the great physical depression of the patient, produced by bungling medication, might have been tolerated for many years, may become rapidly progressive.

These dangers have been repeatedly pointed out, but it is doubtful if they are as fully appreciated by physicians as they should be. Large doses of powerful drugs are fashionable. The profession needs a vivid realization of their power for evil, as well as for good, to avoid gross error in practice and ultimate opprobrium.

To get the best results in the treatment of rheumatism by the use of the salicylates, they should be given in the smallest doses possible by which the disease can be controlled, the dose for each individual patient being found by experiment. If it is found that the patient does not tolerate the remedy it should at once be discontinued, and alkalies, tincture of iron in large doses, or some other tonic which seems appropriate, should be substituted.

The prognosis of septic endocarditis has generally been considered absolutely hopeless. In the *Practitioner* of August, 1886, however, Dr. A. Ernest Sansom records a case presenting the symptoms of rapidly progressive endocarditis of a septic type, which recovered under the use of 30-grain doses three times daily of sulpho-carbolate of sodium. This was given after the patient had been four weeks in the hospital losing ground on other treatment, and resulted, after a week, in manifest improvement. The treatment was kept up for twenty-three days, and was followed by tonics, with the result of a final restoration to apparent health, though with cardiac murmurs indicative of damaged valves. The diagnosis was based on the peculiar hebetude of the patient, continued prostration, rapid wasting, constipation alternating with diarrhœa, with the physical evidences of changing and developing valvular murmurs. This patient returned ten months later with what were supposed to be symptoms of failing compensation of the heart muscle. Treatment based on this assumption proving useless, the sulpho-carbolate was given again, but the patient died two days later. At the autopsy recent vegetations were found on the mitral, tricuspid, and aortic valves, and a slight ulceration on the latter. Numerous micrococci were found. Dr. Sansom regarded the evidence as conclusive that the case was septic in both attacks.

Such a case coming from such a well-known authority as Dr. Sansom certainly deserves attention.

R. VAN SANTVOORD M.D.

OCCASIONAL REPORT ON DISEASES OF THE NERVOUS SYSTEM.

BY FREDERICK PETERSON, M.D.

Dr. J. Hughlings Jackson on the Diagnosis and Treatment of Diseases of the Brain.—The author in some thoughtful remarks upon this subject urges that we should classify and investigate nervous diseases on the principle of evolution, or reversals of evolution, which are really dissolutions. He would not have this method applied for directly practical purposes, but there would be an indirect practical benefit derived from it. For instance, although miners' nystagmus, writers' cramp, dancers' cramp, and many other professional spasms are vastly different, practically and clinically, yet each is a member of one homologous series, having the same pathology, being diseases of motor centres on different levels of evolution. Take locomotor ataxia as another example. We have a typical form of the disease, yet sub- and super-typical cases without number, cases complicated with glycosuria, or ophthalmoplegia externa, several kinds of pupillary reactions, optic atrophy, gastric crises, bladder troubles, etc. Nowadays ataxia is not considered a necessary symptom of tabes. It is less serious than tabetic amaurosis, and far less serious to life

than the bladder disorder of this disease. There are frequent complications with symptoms from other types, progressive muscular atrophy, lateral sclerosis, Freidreich's disease, etc. Taking many cases, it may be said, without much exaggeration, that tabes has a universal symptomatology. It is not a disease of the spinal cord alone, but of many different parts of the whole level of evolution. Lateral sclerosis is a disease of a strand of fibres connecting some lowest motor centres and all middle motor centres (the so-called motor region of the cortex); and hemiplegia is also owing to disease of the same strand when due to lesion in the internal capsule. Such fibres, although integral parts of the cord, medulla, and pons, are "extrinsic fibres of the level." The really intrinsic fibres are those inter-connecting the several centres of the level itself, across and up and down. He hopes we may soon be able to adopt a nomenclature analogous to that in chemistry, one telling us in the name of this or that patient's disease, the several particular elements of the lowest level morbidly affected, and declaring what other symptoms in this or that case are owing to lesion of extrinsic elements of the level. A name after the style of "amyotrophic lateral sclerosis" is good, because named partly from a symptom or peripheral condition at least, and partly from a central lesion.

He would classify migraine, epilepsy proper, and epileptiform seizures as one genus, on the basis that each results from a discharging lesion of some part of the cerebral cortex, without, however, overlooking their vast differences practically. In the same manner such widely differing animals as whales, bats, and hedgehogs are scientifically termed mammals.—*Brit. Med. Jour.*, July 14, 1888.

Poore (G. V.) on Writers' Cramp.—The author analyzes 168 cases, dividing them into three groups: I. *The paralytic group*, including 20 cases—1 due to lead poisoning, 2 to pressure on nerves, and the remainder probably to old cerebral paralysis. II. *The degenerative group*—2 of disseminated sclerosis, 3 of posterior sclerosis, 2 of paralysis agitans, 2 of lateral sclerosis, 5 of muscular atrophy and fibrillary tremor, 1 of general paralysis, 1 of marked tremor of right hand and foot, 1 of emotional weakness and color-blindness, 3 of rheumatic thickening of finger-joints or muscles, 1 of gout, and 2 of alcoholism—23 in all. III. *The neuro-muscular group*, including all not marked by symptoms pointing to lesions of nerve centres. The most important symptoms in this latter group were tenderness over some nerve of the arm—usually the median; changed faradic irritability of muscles—most commonly the imterossei,—and tremor. Tremor occurred in 87 of the 168 cases. Nervous spasm was rare. The methods of treatment giving some success were: 1. Improvement of the general health by diet, regulation of the bowels, and administration of tonics and alteratives, particularly arsenic. 2. Application of counter-irritants over nerve trunks. 3. Promotion of circulation and nutrition in affected limb by means of massage, hot baths, and electricity. Massage must not be employed while there is tenderness of nerve-trunks.—*Medico-Chirurgical Transactions*, vol. lxx.; *Dub. Jour. Med. Sciences*, June, 1888.

Aphemia.—*The Boston Med. and Surg. Jour.* (Jan., 1888) discusses this subject in an editorial. The word aphemia is more correctly limited to the loss, more or less complete, of the memory of the coördinated movements necessary for the articulation of words. The word aphasia is now used in a more generic sense as the amnesia of signs, and includes, as species, aphemia (motor aphasia), word-blindness, word-deafness, and agraphia (sensory aphasia). Among the synonyms of aphemia the following are in use by various authorities: *Logoplegia* (Jaccoud), *laloplegia* (Lichtenstein), *ataxic aphasia* (Kussmaul), *amnemonomia* (Piorry), *verbal paralysis* (Tamburini). Bouillaud correctly decribed this form of aphasia sixty-two years ago. He said: "It is a loss of memory which does not deprive its victims of the faculty of expressing their ideas and desires by other signs than spoken language, such as gestures and writing." Broca first called it aphemia, and located its accompanying lesion in the posterior third of the third frontal convolution on the left side, an observation which has since been thoroughly confirmed. Doubtless in left-handed persons the corresponding gyrus on the right side is the one on which devolves the co-ordination of speech movements. But the association of aphemia with lesion of Broca's convolution is so constant that the clinical observer in presence of a case of motor aphasia is justified in making an almost absolute diagnosis as to the seat of the trouble.

Bramwell (Byrom) on Sensory Jacksonian Epilepsy.—In speaking of this disease the author excludes ordinary epilepsy, accompanied by sensory auræ, and also such conditions as migraine, where there are subjective visual sensations followed by temporary visual defects (hemianopsia). The rarity of sensory accompanied with motor Jacksonian epilepsy may of course be due to the fact that localized irritative lesions, such as syphilitic deposits, much more frequently invade the motor than the sensory area of the cerebral cortex; but it is probably, in part at least, accounted for by the fact that the effects of discharge and exhaustion of a moter centre (spasm and paralysis of muscles) are much more striking symptoms to both patient and physician than the corresponding results of discharge and paralysis of a sensory centre. In other words, it is probable that cases of true sensory Jacksonian epilepsy are more common than is usually supposed. The author relates in detail a case of this kind, a man, aged sixty-three, syphilitic, who for ten years has suffered from "attacks of flashings" in the right eye. During attack he sees red and white flashes. The nervous elements discharged evidently correspond to the left half of each retina. The whole attack lasts usually three or four weeks, and consists of paroxysms every five or ten minutes. At first there was but one attack per year, but now two. During the whole attack there is right-sided homonymous hemianopsia. The case is almost completely cured by treatment with iodide and bromide of potassium.—*Edinburgh Med. Journal*, Aug., 1887.

MacKenzie (S.) on Chorea.—This is the report of the Collective Investigation Committee of the British Medical Association. There is an analysis of 439 cases of chorea. As regards sex, there were nearly three females to one male. Over 93 per cent. of the cases were between six and twenty years of age. Rheumatism preceded, or was associated with, the chorea in 32 per cent. Scarlet-fever was an antecedent in over 29 per cent. of the cases, measles in 26 per cent., anæmia in 20 per cent. The exciting cause in 50 per cent. of the cases was of a nervous character, such as fright, mental strain, etc. There was some heart affection in 32 per cent., in nearly every case mitral.—*Brit. Med. Journal*, Feb. 26, 1887.

Buzzard (T.) on the Significance and Value of Tendon-Reflex.—If careful examination fails to elicit the knee-jerk, the author thinks that we have to do with something of pathological import. It does not suffice to merely strike the ligamentous patellæ in the ordinary way; but the patient must reinforce the jerk by exerting other muscles as recommended by Jendrassik, for instance, by locking the fingers of both hands together and attempting to pull them energetically apart. Absence of knee-jerk signifies organic lesion of muscle, peripheral nerve, or spinal cord in its lumbar enlargement. It may, however, result temporarily from an epileptic fit, an apoplectic seizure, or the action of certain narcotics. As an example of muscular cause, pseudo-hypertrophic or Duchenne's paralysis may be mentioned, where the knee-jerk gradually disappears and never returns. It is almost always lost in peripheral neuritis of the lower extremities, but is regained upon recovery of the patient. It vanishes in most cases of diphtheritic and alcoholic paralysis, and is often absent in diabetes, and usually in lead palsy of the lower extremities and multiple neuritis. Spinal meningitis affecting the anterior or posterior nerve roots in the lower part of cord destroys the knee-jerk. Transverse myelitis, anterior poliomyelitis, compression and softening of the lumbar cord cause loss of tendon-reflex. Among chronic diseases, tabes dorsalis, insular sclerosis, tumor, and chronic poliomyelitis causing progressive muscular atrophy will do the same. In Pott's disease the knee-jerks are enormously increased, and there is marked ankle-clonus, because the lesion is above the lumbar enlargement, almost alway in the mid-dorsal region of the spine. If it should, however, affect the lumbar spine, there would be absence of the knee-jerk. There are certain rare and exceptional cases where the tendon-reflex has been lost in intracranial disease, and no reason for this can be adduced, but as a grand general rule loss of knee-jerk points to spinal disorder.

There is exaggeration of the reflex, together with ankle-clonus, in most cases of insular cerebro-spinal sclerosis. Sometimes in this disease the knee-jerk may be lost in one or both limbs, although ankle-clonus is still present. Increased knee-jerk and ankle-clonus are frequently present in cases of epilepsy. Disease of the

lateral columns, such as descending sclerosis secondary to a cortical lesion, and spastic paraplegia, and many intracranial lesions produce exaggerations of the tendon-reflex. It is almost always in excess in neurasthemic conditions, and often in functional paraplegia.—*Lancet*, Jan. 28, 1888.

Eccles (A. S.) on the Treatment of Sleeplessness.—The author finds a hot bath just before bedtime most valuable for the wakefulness often associated with dyspeptic or gouty symptoms, chronic joint affections, and sciatica. There is a particular method of employment of the hot bath to be observed. The patient is immediately stripped on reaching the bath-room, and while in a stooping posture his head and face rapidly douched with water at 100° F. Thus the greater surface of his body is cooled and the blood driven inwards to the viscera ; the hot water to the head and the posture of the body causes a filling of all the cerebral vessels. Then the whole body, except the head, is immersed in water at 98° F., rapidly raised to 105°–110° F. By this means the pulse is lowered, the vessels of the body dilated, and the blood supply of the brain diminished. This takes place in eight to fifteen minutes, and gives rise to a sensation of pleasant languor. The patient is then slowly raised from the bath, wrapped in warm blankets, and conducted to the bedroom without haste. When he reaches the bedroom the moisture of the body will have disappeared ; he dons his night-clothes, lies down with head well raised and a hot bottle at the feet. Under these circumstances a good night generally follows. The hot bath is contra-indicated in extreme anæmia, emaciation, aortic valvular disease, and atheroma. In such case Dr. Brunton's suggestion to use strychnine as a hypnotic is valuable, as it probably produces contraction of the cerebral vessels by action upon the vaso-motor centre. In cases of insomnia associated with heart disease, general corporeal massage at bedtime is an excellent remedy, producing as it does vascular dilatation over a large area. Such patients should keep the recumbent position by day as well as night until the sleeplessness is relieved.

By prolonged kneading of the abdomen one can produce distension of the mesenteric vessels to an extent sufficient to cause compensatory contraction in other vascular areas, slowing of the heart's action, and modification of surface temperature. The good effect of this may be further supplemented by the subsequent application of a hot fomentation to the whole abdominal surface. Particular care is necessary in order to employ a wet compress that is hot and will remain hot some time. This is often a useful means of producing sleep in neurasthenia, anæmia, and dyspepsia.

The most difficult forms of insomnia to treat are those due to prolonged overwork, mental distress, morphine habit, chloral drinking, and chronic *bhang* poisoning, all of which are best described by the term erethetic neurasthenia. With the approach of nightfall these cases present an exacerbation of their worst symptoms, headache, palpitation, tremors, eructations, exalted sensations, mental anxiety, and perhaps a craving for their habitual poison. In such cases drugs are contra-indicated and moral suasion is useless. A careful administration of the wet pack is the most efficient remedy. Generally it is best to rest the body for a few moments to raise the superficial temperature, which is, as a rule, subnormal, and then the cold pack is applied for twenty to thirty minutes, which usually suffices to soothe and calm the nervous system. The pack is then removed and the well-heated night-clothing donned. This generally produces refreshing sleep, but occasionally repetition is necessary.—*The Practitioner*, March, 1888.

OCCASIONAL REPORT ON DISEASES OF THE TESTIS AND SCROTUM.

BY CONDICT W. CUTLER, M.D.

Taylor (R. W.) on Tubercle of the Testis.—The following cases are interesting not only in the lesions presenting, but also in the unusual clinical fact that the tubercular process began spontaneously in the epididymis, involving later the testis, neither having been the seat of previous inflammation.

I.—J. R., aged 52 years., admitted to Charity Hospital Dec. 28, 1886. The family history was bad, his mother, three sisters, and three brothers having died of phthisis. He never had contracted any venereal disease. Three months before admission his left testis began to swell and

become very painful, and just before admission his right testicle became affected in the same manner.

Three weeks afterwards an abscess formed in the left testis which was opened, and six weeks later both testes were removed antiseptically with perfect healing at the end of one week. His general health, which had been very much run down, began to improve at once, and he gained considerably in weight. The bacillus tuberculosis was found in the sputum.

Gross appearances. Left organ.—The epididymis much enlarged and honeycombed with yellowish, semi-fluid areas. The outer surface of the albuginea smooth, but the mediastinum thickened. The cut surface of the testis studded with small grayish nodules.

Right organ.—The epididymis presents the same appearance as the left, but the testis contains a large cheesy mass involving the mediastinum. The small white nodules are present as in the other testis.

Microscopical appearance of the two organs is nearly similar. In the *epididymis* are found, (1) collections of pus cells; (2) areas of round-cell tissue resembling granulation tissue; (3) tubercle tissue—like the former, but differing by the presence of tubercle bacilli; (4) tubercle granula, containing central giant cells; (5) groups of normal tubules; (6) Degenerated tubules. The walls of some of these tubules are infiltrated with round cells, others with degenerated cells containing granular matter and fragmentary nuclei resembling in section tubercle granula. The lumen of many tubules is filled with pus cells, others with pre-existing epithelium, and still others with round cells.

In the *testis* are found: (1) tubercle granula few in number and surrounded by a cheesy zone. (2) Increased amount of interstitial tissue containing numerous clusters of small round cells. (3) Changes in the walls of the tubules consisting in thickened walls and increased numbers of nuclei. The membrana propria is frequently separated from the remaining layers and the space occupied with a homogenous mass filled with nuclei apparently from the cells lining the tubules. Between this mass and the walls of the tubules are small cavities and cracks. Some of the tubules are filled with red bloodcells, others with granular debris, free cells, and nuclei.

The diameter of some of the tubules is increased owing to their dilatation and thickening of their walls with round-cell and granular infiltration. (4) Grayish-white nodules composed of amorphous material, with indistinct outline. The smallest ones are occasioned by tubercle granula or by large clusters of round cells.

The larger cheesy mass seen in the right testis consists of confluent miliary tubercles and cheesy areas.

II.—B. C. American, aged 33. Family history bad—several relatives having died of phthisis. His own health had never been good, having suffered frequently from nasal catarrh, indigestion, and functional heart disease. Never had any venereal disease. In November, 1885, he first noticed a slight swelling on the head of the left epididymis, accompanied by a slight watery discharge from the urethra. This swelling greatly increased, until it involved the whole testis, which in the following February was twice its normal size, and accompanied with a hydrocele. In April, an opening formed near the tail of the epididymis, discharging considerable pus. In August the right testicle became affected, and in November, 1886, an abscess seated over it opened spontaneously. In April, 1887, both testes were removed antiseptically. The healing of the wound was slow, but unattended with pus formation. At the time no bacilli were found in the sputum.

Gross appearance. Left organ.—The epididymis enlarged, cheesy, and contains a cyst, with clear fluid, at its summit. The mediastinum testis is thickened and contains a cheesy nodule the size of a pea at upper part. The cut surface of the testis is studded with minute white spots.

Right organ.—The epididymis enlarged, soft and cheesy. A mass of confluent nodules occupies the mediastinum and one third of the testis, with larger nodules in the remainder.

The albuginea is nodular.

Microscopical examination. Left organ.—The *epididymis* contains granulation tissue and cheesy areas. Diffuse changes are seen in the stroma and parenchyma of the *testicle*, similar to those in Case I., but less marked. The interstitial tissue is increased, the walls of the tubules but slightly thickened or changed and the tubercle granula seen only at the medastinum. The vas deferens has a cheesy centre.

Right organ.—The *epididymis* is like the

left in structure. In the *testicle* the interstitial tissue is greatly increased and the walls of the nodules greatly thickened, with granular masses containing few nuclei occupying the lumen, some of which are nearly obliterated. The vas deferens has a cheesy centre. Larger and smaller tubercles are found throughout the organ.

Bennett (W. H.) on Tubercular Testes.—The author records five cases of tubercular testes, in each of which the disease occurred in previously healthy subjects, and was induced in four instances by traumatism, and in one by gonorrhœa. In all the spinal column became affected, and at an earlier period than the other testicle or epididymis, or even the other parts of the same testicle became involved. The author concluded from his observations that tuberculous testes might result solely from injury, and that it tended if uninterfered with to generalization, the greatest tendency thereto being subsequent to breaking down of the original disease. The treatment recommenced was castration before the original disease had far advanced in disintegration.—*The Medical Press*, Feb., 1888.

Borck (E.) on Diseases of the Testicle.—About one man in ten is affected with some kind of disease of the testicle, and yet in cases of unfruitful marriages the woman is nearly always the one who receives the treatment. The family physician first exhausts all his prescriptions on the wife, and then sends her to the gynecologist, who discovers a little tilting of the womb or some abrasion of the cervix. Under treatment she becomes despondent, worried, and hysterical, and is placed under the care of a neurologist, but still barrenness continues. In many such cases as here pictured the treatment is extended to the wrong party, and it is the husband and not the wife who is at fault. Do not take for granted it is always the woman's fault in cases of unfruitful unions and subject her to a long course of treatment without first examining the man, for frequently you will be able to find that the trouble lies with him.—*Med. Record*, May 19, 1888.

Popoff (V. N.) on Displacement of the Testicle.—The patient when examined was twenty-four years of age. The scrotum was found to be normally developed, with the right testicle in its usual situation ; but the left half of the scrotum was empty, while exactly at the root of the penis there was a swelling of the size of a walnut, covered with normal skin, and containing an oval body which was about four-fifths the size of the normal testicle, but felt somewhat softer. The patient said the swelling had been there since birth. He had, however, suffered in early childhood from an inguinal hernia, and Prof. Popoff thinks it more likely that the displacement of the testicle developed under the influence of the rupture. The man's sexual power was formerly quite normal, but for about six months he had been impotent. Dr. Popoff could find no similar case in medical literature.—*British Med. Jour.*, March 17, 1888.

Massage in Traumatic Orchitis and Epididymitis.—In the *Meditzinskoiĕ Obozrenië*, No. 1, 1887, p. 41, Dr. Evgeny D. Kürduemoff, of the Moscow Military Hospital, says that he recently tried the massage treatment in three cases of orchitis and in two of epididymitis, all the patients being soldiers who had received some injury to the parts, in the course of gymnastic exercises, etc. Massage was resorted to, with the view of bringing about a resolution of the painful induration and enlargement, on the 7th, 11th, 14th, and 15th day of the disease, after ordinary means had failed. The treatment was carried out once a day, and the number of sittings required varied from five to ten, each lasting from ten to twenty minutes. The manipulations consisted in alternate centripetal rubbing and kneading of the epididymis, testis, and hypogastric region. The results were most satisfactory. The swelling and induration seemed to "melt away under the hand." In every case the pain, tenderness, and feeling of weight diminished after the first sitting. In no case were any unpleasant secondary effects observed. Dr. Kürduemoff thinks that massage may also advantageously be tried in the initial stage of acute inflammation of the testicle, with the object of removing congestion, and promoting absorption of serous infiltration, as well as in plastic orchitis.—*British Med. Jour.*, May 28, 1888.

C. H. Rodi on Treatment of Varicocele.—In excision of the scrotum for the treatment of varicocele in which the scrotal clamp is used simply as a guide. After the clamp is removed, hemorrhage is often found very troublesome, and the bleeding points difficult to secure. Even

after great care is taken to check all bleeding, secondary hemorrhage is not at all uncommon. To obviate this difficulty, Dr. Ferdinand King has constructed a clamp by the use of which there is absolutely no hemorrhage. It has a longitudinal groove to receive a fold of the scrotum which prevents slipping, and is perforated with small holes about one-eighth inch apart, so constructed that the clamp can be removed after the sutures are tied.—*Medical Record*, July 7, 1888.

Bedford (C. H.) on the Treatment of Hydrocele.—The most successful treatment of a recent uncomplicated case of hydrocele is the injection into the sac of ℥ ss of equal parts of tincture of iodine and water, manipulating so that the injection comes in contact with all parts of the secreting surfaces and subsequent strapping of the testicle of the affected side. When no relief is afforded from this treatment it is generally due to the fact that there exists a chronic orchitis or epididymitis. The strapping should be reapplied every fourth day for three or four weeks.

Excision is the only sound treatment for tropical hydrocele, for in these cases the walls are of great thickness, and often chondrified or ossified. Congenital and infantile cases are best treated by aspirating with a fine needle, but in these cases injections should not be used.

Hydrocele in the canal of Nuck or about the round ligament should be treated by tapping and iodine injections with subsequent strapping, as also should encysted hydrocele in the male.

In old men all forms of hydrocele should be merely palliated by tapping alone, or by tapping combined with strapping.—*Edinburg Med. Journal*, May, 1888.

Weir (R. F.) on the Treatment of Hydrocele.—The operation of incision is an excellent one in some cases. It should always be resorted to when there is any doubt in the matter of diagnosis. When injection fails, when the walls of the sac are thick from calcareous deposit, when complicated with hematocele, and when the contents of the sac are sero-purulent. Should severe inflammation or suppuration follow treatment by injection, the only method is by antiseptic incision. In performing this operation, the sac is finely incised from top to bottom, and if the walls are thickened or degenerated they should be dissected out and a full antiseptic dressing applied. If tapping is done, a large trocar and canula should be used and the sac washed out with carbolic acid 1-15. A drainage tube is inserted through the canula, the latter being then removed, leaving the tube *in situ*. Full antiseptic dressing should be applied, and the parts left undisturbed for five days, and then reapplied. At the end of ten days the tube may be removed, as a cure is usually effected by that time.—*The Med. Register*, March 31, 1888.

MISCELLANEOUS.

A SUBSTITUTE FOR TRANSFUSION.

BY CELEST. H. BENEDICT, M.D.,
Bridgeport, Conn.

I was called Dec. 6, 1877, to see Lillie B——, nine years of age, sick with typhoid fever. She passed through the various stages until Jan. 3, 1878, when convalescence seemed established, and the child sat up, called for her doll, and played until exhausted. Epistaxis then set in and became alarming. Pulse from 140 to 150. I applied cold to the forehead, and gave tincture of the chloride of iron in ten-drop doses every half hour. The hemorrhage ceased, and I left to attend a case of hemiplegia seven miles distant, directing the mother to apply ice to the forehead should the trouble recur in my absence. I was called at midnight, and found that hemorrhage had occurred from posterior nares and filled the stomach with blood; the child had vomited, and a state of collapse set in. I sent for a surgeon to assist in plugging the posterior nares. He said it was too late, as she was then to all appearance dying. He left, saying there was nothing for us to do. The child was unconscious. The death damp was upon her face. Pulse and respiration too faint to count. A faint flutter now and then indicated that the heart was still struggling to carry on its work. In considering what could be done, I decided to experiment. Transfusion was out of the question, as no instruments were at hand, and no physician to assist. I directed the father to bring in a young fowl from the barn. As soon as possible he complied. I then placed a tin cup, with a little warm water inside, in a basin of hot water, and held it under the fowl's throat, while he severed the vessels of the neck. Enough warm water to prevent

clotting was added, and I injected the fluid into the rectum through a Davidson syringe, previously warmed by pumping hot water through it, care being taken to perform the injection under the bed-clothes without moving the child, for fear the exposure might hasten a fatal result. Fifteen minutes later the flutter of the pulse was more perceptible. The injection was repeated in half an hour, and in twenty minutes the pulse was regular and readily counted. An hour or two later she opened her eyes and wished to know why it was so dark. I repeated the blood injections a few times, and then substituted warm milk or beef tea every three hours for a day or two. She made a good recovery, and has since enjoyed good health.

On February 26, 1888, I delivered Mrs. B. of a healthy child. After tying and cutting the cord, I handed the child to the nurse while I removed the placenta. I then turned to the child and saw a pool of blood upon the floor, found, upon examination, that the cord, which was unusually large, had shrunken and caused the hemorrhage. I retied the cord, but the loss of blood had weakened the child so that the respiration was difficult, and the sound caused by it was so loud that it was readily heard in the adjoining rooms. I requested the father to procure a young fowl, and this time a glass fruit-jar containing a little hot water, placed in a basin of hot water, was used to catch the blood. Two teaspoonfuls were then injected into the rectum through a small hard-rubber syringe (previously warmed by filling with hot water). This operation was repeated every hour or two until respiration and the general appearance of the child were restored to a normal condition. The child is now eight months old, strong and healthy. Should similar cases occur at night in large cities where it was difficult to procure young fowls, I have thought that some concentrated liquid preparation of beef similarly employed might prove equally successful, and also be of benefit in wasting diseases and anæmia due to loss of blood from various causes.

[This article calls to mind a case recently reported [1] by Dr. M. Czartoryski, of Stockton, Cal. The patient was a girl of eight, who, when first seen, seemed to be moribund and suffering from leucocythemia. There was extreme emaciation, with anæmia, debility, anorexia, dyspnœa, cough, œdema, and stupor. All the joints were swollen and extremely painful. Almost every remedy, except transfusion, had been tried. Chicken's blood, in this case, was given by the mouth in a warm emulsion (milk?). The blood of from two to ten chickens was given daily. Almost immediate signs of improvement appeared, and the ultimate recovery was complete. Other remedies for the cough, night-sweats, and swollen joints were, of course, employed. The writer says that this method of treatment is recorded in the books of Avicenna, an Arabian, written nearly 1,000 years ago. —EDITOR.]

Winsey (W.) on a Case of Pneumonia with Prolonged High Temperature.—The patient was a colored boy of 13. The attack commenced with pain in the head and right side of the chest, followed by fever. Stupor soon supervened from which he could with difficulty be aroused. The skin was hot and dry, the temperature in the mouth 106°, the respiration rapid, and the pulse 140 and small. The entire right lung seemed pneumonic. Twenty grains of quinine were ordered in divided doses in six hours, turpentine was applied to the chest and cold applications to the head.

The next day the stupor continued and the temperature was 106°, pulse 150 and weaker. Digitalis and whiskey were prescribed. Temperature 106° all that day. Next morning T. 104°, P. 120.

Fourth, fifth, and sixth day temperature 104°, and other symptoms practically unchanged.

On the seventh day the temperature was the lowest it had been since onset of attack, *i. e.*, 102°, with a pulse of 108. At this time a physical examination showed that resolution had set in. The temperature ranged between 102° and 103°, until the tenth day, when it fell to 99°; pulse, 100.—*Maryland Med. Jour.*, July 28, 1888.

Mackay (G.) on a Primary Syphilitic Sore on the Upper Eyelid.—The patient was a boy, aged six, first seen on 11th May, 1888. He was then found to be suffering from a small inflammatory swelling about the size of a pea, situated on the right upper lid near the inner canthus. On the external surface of the lid the skin was unbroken except in the neighborhood of the cilia, where there was a fine, thin, semi-

[1] *Pacific Med. and Surg. Jour.*, June, 1888.

transparent scab. On everting the lid slightly it was found that the mucous membrane on the inner aspect of the swelling was eroded and secreting a little mucopus. There was no abrasion of the ocular conjunctiva, and only slight injection of the conjunctival vessels. The only history that could be obtained on that occasion pointed to its existence for about a week previously as a small stye. The effect of several small poultices and a mild antiseptic lotion was tried. Three days later the little nodule had increased in size chiefly towards the mucous surface, and the ulcerative character appeared more decided. There was also some enlargement of the preauricular and submaxillary glands. The swelling in the lid was moderately firm, but not of cartilaginous hardness, and, saving for the absence of infection of the opposing surfaces and the rarity of that condition in this situation, appeared more like a soft chancre than a primary syphilitic nodule. On the following day specific treatment was commenced. A papular rash, which appeared on his body a few days later, was rather an unusually early manifestation of the constitutional affection, having presented itself barely six weeks after the first appearance was noted in the lid. In some way or other the mother had become affected. She had extensive ulceration of the gums and mucous membrane of the lips, cheeks, tongue, and fauces, and a serpiginous eruption on the chin and side of the neck, which seemed to be of syphilitic origin. While suffering from these symptoms she had frequently kissed the boy, and thus communicated the infection to him. The little boy had as yet no further symptoms, and the primary sore and enlarged glands were now diminishing.—*Edin. Med. Jour.*, Sept., 1888.

Steiner (D. D.) on a Case of Hysteria in the Male.—The patient was a single man of twenty-eight, usually of good health, but of a quiet and melancholy disposition. I first saw the case in January, 1887, through the kindness of Dr. J. S. Akins, of this place, who had treated him during three or four previous attacks. Dr. Akins saw the patient the day before, and his condition was unchanged. About every twenty minutes there were convulsions, and then the muscles became contracted and the limbs rigid. He sometimes assumed a position of opisthotonus, and there would be stertorous breathing, the heart's action becoming rapid and weak. Between the convulsions the muscles were relaxed, and fld. ext. lobelia was given until nausea was produced. The convulsions became less severe till the third day, when they ceased. He made a rapid recovery with the aid of tonics.

Dr. Akins treated him for a less severe attack in August, 1887.

On August 31, 1888, a team of horses ran away from the patient. He exerted himself in their capture, but nothing unusual was noticed in his actions till supper, when his parents saw that he was very nervous. He retired at eight o'clock, and a few minutes later his sister was attracted by his loud breathing. I was called and found him perfectly rigid, with his jaws locked so tightly that I could not force them open without danger of doing harm. Instead of convulsions there were only tremors at short intervals, with stertorous breathing. I gave hypodermic injection of morphia, and left him till morning.

When I returned his condition was unchanged, except the muscles of the jaws seemed less rigid, and we succeeded in giving him water and medicine. In the evening the lower parts of both lungs were congested, and I applied a large blister. The following day the lungs were clear. Sept. 3d he ate some and began to talk again, and Sept. 4th he was able to go about.—*Weekly Med. Rev.*, Sept. 12, 1888.

Chittenden (R. H.) on the Physiological Action of Uranium Salts.—Results previously published had shown the writer that uranyl nitrate, when 0.7 grain of the salt was given in divided doses, caused a rise of temperature and an increase in carbonic-acid excretions.

The object of the experiments described in this paper was to ascertain the effect of uranium salts on proteid metabolism; their toxic action and their influence on the production of glycosuria.

The collective results show that uranium is an irritant poison, and that it, like other metallic irritants, produces gastro-intestinal irritation of more or less intensity, resulting in most cases in a simple enteritis, but often becoming an acute catarrhal inflammation. As a poison it acts slowly, and one hundred and fifty milligrammes appear to act as vigorously as a gramme. In rabbits the first marked symptom is general weakness with a loss of co-ordination, and occasional temporary paralysis of the locomotor mus-

cles. Introduced into the stomach, it checks digestion. It increases proteid metabolism and the excretion of carbonic acid, and causes a rise of temperature. Its effect on nutrition is shown by rapid emaciation. The most marked lesion is seen in the kidney, where it produces acute parenchymatous nephritis. The larger amount of albumen found in the urine shows how greatly the blood-vessels are involved. Small doses cause at first an increased quantity of urine, but toxic doses result in complete suppression. A short time after administration of the drug, more or less sugar is found in the urine; this generally does not come until after albumen has appeared. The production of glycosuria is a very characteristic symptom in uranium poisoning. The urine invariably contains large amounts of calcium oxalates, which fact points to decided malnutrition and helps to explain the marked emaciation so commonly seen. In cases where the poisoning became chronic, the nervous symptons sometimes predominated, as was shown by loss of sight and power of co-ordination.—*Med. Record*, Sept. 22, 1888.

Rockwell (A. H.) on Balsam of Peru as a Surgical Dressing.—About three years ago I read an article on balsam of Peru as a surgical dressing, in which the author claimed that he had obtained very flattering results, the wounds healing kindly and without suppuration. The cases in which it was used were those involving solution of surface continuity from injury. Since reading the article I have used balsam of Peru in a number of cases, mainly cases of fingers and hands, cut and bruised in our saw-mills and factories. I have amputated fingers, sewed up cuts and lacerations, dressed mangled and bruised fingers and hands, and have used balsam of Peru as a dressing, and they have healed quickly, with very little suppuration or inflammatory action, and in many cases almost absolutely without either. In cases where the tissues are bruised and mangled, where we would expect a good deal of sloughing, the tissues, instead, become dried and hard, and, after the wound has healed, separate and become detached in much the same way that a scab separates from the surface of a wound that has healed beneath it. I have also noticed that the balsam has a hæmostatic effect, being quite an effectual agent. I have watched the progress of wounds with this dressing, which is applied on lint or cotton, and it seems to me that the process of healing more nearly approximates nature's method., *i. e.* healing under a scab, than with any dressing with which I am acquainted. The advantages which may be claimed for it are, it furnishes perfect protection (it practically seals the wound), is clean, has a pleasant odor, does not require to be frequently renewed, for there is almost entire freedom from suppuration, and the results in my hands have been uniformly and eminently satisfactory.—*Med. Record*, Oct. 6, 1888.

Flemming (C. E. S.) on Glycerine as a Surgical Dressing.—We want a dressing that is non-irritating, antiseptic, will not become adherent, will allow free drainage, will not allow the discharges to get hard and caked, will be freely miscible with the discharges, and not evaporate at any temperature of the body nor occupy the place intended for the discharges. We have, I think, what we want in the glycerine of starch of the *Pharmacopœia*, with some antiseptic dissolved in it; for example, corrosive sublimate 1 in 1,000 parts. The starch, added for convenience of applying the glycerine, in addition forms a non-irritating surface to apply to the wound, and is a mechanical protection; it is most conveniently applied thickly spread on one or more layers of Gamgee tissue, or some absorbent wool. This application is not irritating, is antiseptic, and is removed with the greatest ease from any wounded surface. As glycerine is freely miscible with the discharges it is quite absorbent; discharge in passing into and through the dressing becomes mixed with the glycerine, and as this does not evaporate, it is thus prevented from becoming caked, or hard and dry. The glycerine, itself hygroscopic, does not usurp the place of the discharge nor prevent the free escape of the watery vapors. Such a dressing after several days will be found moist, soft, flexible, and easily removed; it is heavy with the quantity of fluid it contains, a proof of its absorptive powers. The discharges are not collected in one spot. Next the wound there is a jelly-like layer which is easily removed, leaving a clean surface, and the sutures, if any, distinct and easily taken out, not being caked with blood.

In my own practice I have found healing of incised wounds under this dressing quick and accurate, and the dressing of lacerated and contused wounds is absolutely painless

and very quick. I have found it of much benefit in those chronic granulating wounds which every dressing seems to irritate, and have applied it with success as a daily dressing in two cases of purulent conjunctivitis. I have not had an opportunity of trying, but should think glycerine of starch might be used with advantage in skin grafting.—*Br. Med. Jour.*, Sept. 22, 1888.

Treasurer (W. B. C.) on a Case of Gunshot Wound of the Petrous Portion of the Temporal Bone, Producing Facial Palsy and Intense Pain, Relieved by Removal of Portions of the Bullet Four Years Later.—F. H——, aged thirty-two, clerk, shot himself in the right ear on October 29, 1884. Two shots were fired, and the bullets entered the external auditory meatus, penetrating the bone about half an inch from the entrance. He became unconscious for about eight hours afterwards. On November 11th an attempt to remove the bullets was made, and part of one extracted under chloroform. Further portions were removed on November 21st and February 1st following, the pieces with the one first removed weighing within a grain or two of the corresponding bullet. During this time he was subject to intense pain, with nearly complete deafness, and a sensation of weight if he lay on the left side. These symptoms were partly relieved after the last operation, but a continuous discharge of pus remained, with an occasional powder grain in it, and facial paralysis gradually supervened. In August, 1885, he went into University College Hospital under Mr. Barker's care, at which time it was not considered justifiable to search by operation for the second bullet, but careful antiseptic treatment of the wound in the ear resulted in the Eustachian tube being freely opened, but no permanent relief was given. He came under my notice early this year with a discharge of muco-pus from the ear, which occasionally became obstructed, causing most acute pain in the ear, accompanied by tenderness over the mastoid bone, which were relieved when the discharge flowed freely again. There was facial paralysis, with difficulty in swallowing, and dribbling of saliva, worse when the discharge was retained. He was still unable to lie on the left side, was seldom free from pain, and was quite deaf in the right ear. Finding I could give him no permanent relief, and thinking there was another bullet in the temporal bone, I advised him to consult Mr. A. E. Barker again with a view to an operation, and he went into University College Hospital on June 14th. On June 22d he was placed under chloroform, and Mr. Barker made an incision, beginning half an inch above and half an inch behind the external auditory meatus, running vertically two inches and a half upwards, joined by a horizontal one an inch long at the top. The flap, including the ear, was turned forward, the bone bared, and the periosteum raised. The front part of the base of the mastoid was widely gouged away, and three small pieces of lead removed, which were embedded beneath the mastoid antrum. The mastoid process was so densely sclerosed that it had to be cut out with the surrounding bone. The cavity of the antrum was opened, with a drop of muco-pus in it, syringed out, and made to communicate freely with the opening cut in the bone, and with the external auditory meatus, which was almost impervious before. The wound was stitched top and bottom, a drainage tube placed in the antrum, and a dressing of iodoform and salicylic wool applied. The symptoms were relieved after the operation, the temperature never rose above 100°, and the patient made a rapid recovery. The wound in the antrum was kept open until the drainage tube was forced out by the growth of new bone. The facial paralysis was much lessened, and, beyond a slight discharge from the ear, the patient got well and resumed his occupation.

The interest in this case centres round the second bullet. It was not thought probable at the time that he could have discharged two bullets into the ear, and the room was searched for the second bullet; but though it was not found, no search was made for it after the pieces which seemed to correspond to one bullet had been extracted. Probably the second bullet fired, if the portions removed by Mr. Barker belonged to it, followed the track of the first one, struck its base and splintered; if so, the portions of bullet first extracted may have belonged to the second bullet fired. The extreme density of the bone probably saved the man's life, and concussion did not occur with sufficient rapidity to prevent him firing the second shot. The facial palsy is interesting, being probably due to pressure from the new material thrown out for the repair of the bone.—*Lancet*, Sept. 12, 1888.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of

CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital; CONDICT W. CUTLER, M.D., Instructor in Diseases of the Skin, Post-Graduate Medical School, New York; JOHN S. HAWLEY, M.D., Attending Gynæcologist, New York Hospital, Out-Patient Department; FREDERICK PETERSON, M.D., Lecturer on Nervous Diseases at the New York Polyclinic.

VOL. V., No. 42. October 18, 1888. WHOLE No. 90.

CONTENTS.

	PAGE
Therapeutics	497
Pathology	502
Miscellany	506

THERAPEUTICS.

Perron on a New Mode of Cutaneous Revulsion.—Some time since the author had under his care a patient apparently afflicted by some incipient medullary disease in which he had ineffectually tried the bromides, antipyrine, and mild revulsants, such as the tincture of iodine and sinapisms. The patient would not submit to the actual cautery, and the medical attendant had not the apparatus for employing the spray of the chloride of methyl.

With a wad of linen moistened with phenic acid[1] brisk friction was employed over the spine in the dorsal, lumbar, and sacral regions, covering an area equal to about a square foot. The immediate pain produced was very slight, and in a few moments an undoubted superficial anæsthesia came on, accompanied by a feeling of mild smarting. About thirty seconds after the friction the patient experienced a vague sensation along the spine, a marked degree of muscular weakness, and, what is most remarkable, noises and dizziness in the head and tingling sensations in the finger tips. These various feelings were so pronounced that the patient had to sit down lest he fall. This state was very transitory and after a few minutes disappeared, leaving the back simply hot and painful for some hours, after which the active smarting disappeared. The skin was left congested and very sensitive under a tanned and parchment-like epidermis. This state of things lasted about twelve days, when the epidermis became detached in shreds resembling gold-beater's skin, leaving exposed a newly formed pellicle. At no time were there crusts, serosity, or cracks. In spite of the re-formation of the epidermis the skin remained for three weeks thick, sensitive, red, and easily rendered hyperæmic by friction, proving that the revulsion still persisted. During this time the patient's condition had improved wonderfully.

During the first few days the spinal and sciatic pains lessened, to disappear entirely later. The walk and finer movements of the lower extremities, before hesitating and deficient, became firm and normal. A sort of genital pruritus from which the patient suffered, and which aggravated the spinal pains, also disappeared. In short, the revulsion, by its intensity and continuity, radically removed the hyperæmia of the cord. At the request of the patient the application was repeated with the result of producing the same train of nervous phenomena.

In another patient, subject to a general irritability of the cord, a similar application produced muscular depression, tingling of the extremities, vertigo, and tinnitus, with slight pallor of the face. Both subjects were adults of good morale and not emotional.

The almost instantaneous action of phenic acid cannot be attributed to cauterization, because that effect is not immediate, nor are any similar effects produced by the mineral acids, sulphuric or nitric, although they are more energetic and corrosive. The nervous action of phenic acid upon the skin is constant, as any one who has immersed his hands in a carbolic solution can testify.

[1] Crystallized phenic acid and water equal parts liquified by heat.

Phenic acid then, aside from its caustic effect, seems to have a special action upon nerve terminations, and when applied to areas supplied by the posterior spinal nerves, through these nerves and through the posterior tracts of the cord, exerts its special action also upon the brain. The simplicity of the application, the pain so bearable and of such short duration from phenic acid, make it a revulsive of great promise in all diseases of the spinal cord, in arthropathies, and even in affections of intrathoracic organs.

It will be remembered that Verneuil has lately employed a spray of phenic acid with great success in the formative stage of anthrax and furuncles. It allays the pain, sometimes aborts the process, and always ameliorates the pathological condition. This beneficial action the author attributes not to the antiseptic or refrigerant action of the spray, but to the effect of the remedy upon the nerves of the part.—*Gaz. Hebd. des Sci. Méd. de Bordeaux*, Aug. 26, 1888.

Ringwood (J.) on the Chloride of Ammonium.—In the present age of therapeutic unrest every newly puffed remedy is eagerly seized on by the profession and galloped to an untimely death, while our steady, sure-footed old friends are allowed to eat their heads off in the stable. Chloride of ammonium is a grand old medicine, with few equals in many forms of neuralgia. It proves itself a trusty friend to doctor and patient when administered in many forms of facial neuralgia, brachial neuralgia, pleurodynia, and the intense intercostal neuralgia preceding or following shingles. In facial neuralgia, as stated in "Watson's Practice of Medicine," it generally gives such rapid relief that a fourth dose is seldom required. Chloride of ammonium acts as a diffusible stimulant, absorbent, and tonic; its action in some cases being akin to that of antipyrine, without the latter's depressant cardiac effects. I have repeatedly found the most gratifying results from a steady course of chloride of ammonium, in from five- to ten-grain doses administered twice a day in half a tumbler of Vichy water, in cases of sluggish liver, hepatic congestion, and suppressed gout. In cases of pelvic cellulitis, where there is a large amount of deposit, I have seen steady absorption taking place while the patient was taking ten-grain doses of chloride of ammonium three times a day. Thirty grains of chloride of ammonium will generally sober for fifteen or twenty minutes patients helplessly drunk, so that they can walk steadily and speak rationally, as long as the first stimulant effect of the ammonium lasts. In every case it is advisable to give this medicine well diluted, and either to diminish the doses or stop the medicine for a few days when the corners of the mouth become sore.—*Med. Press*, Sept. 26, 1888.

Green (W. T.) on the Chloride of Ammonium in Neuralgia.—Three weeks since a lady called at my house in the evening to ask me to attend her in her approaching confinement, when her husband, who accompanied her said: "I suppose you can't do any thing for me?" I replied that that would, of course, depend upon what was the matter with him. He then told me that he had been suffering from neuralgia in the head and neck, left side, for fifteen weeks without a day's intermission, and that the pain was getting worse instead of better, so that at times he felt as if he must "go out of his mind."

I asked what he had been doing for his complaint, and he answered by producing a bundle of prescriptions which all rang the changes upon sulphate of magnesia, quinine, and iron, in various more or less elaborate combinations.

I made him up a mixture of chloride of ammonium, twenty grains to the dose, which he took away with him. The next evening the gentleman called to say that he had taken what I had given him, and, for the first time for fifteen weeks, had passed a day without pain, having felt an improvement after taking the first dose of the medicine.

He begged for another bottle as he was afraid the neuralgia might return, so I gave it to him, but he did not take the whole of it, and has had no return of the neuralgia since.

Chloride of ammonium is a very simple, most valuable, and strangely neglected drug, which I have never known to fail in the treatment of neuralgia.—*Med. Press*, Sept. 12, 1888.

The Danger of Subcutaneous Injections of Mercury.—Hallopeau reports a case in which five injections of mercurial oil, made at intervals of eight days, produced a stomatitis of such severity that the patient's life was endangered. In speaking of the case the reporter asserted that he

had never seen its equal in his professional career; it called to his mind the descriptions of the old anti-mercurialists.

The production of similar accidents seems inevitable in a certain number of cases treated by gray oil, as a peculiar intolerance of mercury is not rare, and this fact alone should cause the disuse of the method. It should not be lost sight of that in other methods of administration the dose can be regulated at will, diminished or stopped at the first appearance of a stomatitis.

One of the great advantages the advocates of this method claim is its precision. It is true the amount of the drug introduced under the skin is known, but the rapidity with which it is absorbed is not known. It can be shown that in an hour or so the drug appears in the urine, but in what proportion it penetrates each day into the general circulation and acts upon the specific lesions no one can say. Given in this way a store of mercury is put at the mercy of the chemical reactions of the tissues of the syphilitic subject.

The history of the case in question, where a stomatitis appeared many days after the fourth injection, seems to prove that the mercury may be stored up for a certain time at the place of injection, to be finally absorbed *en masse*.

All things considered, the new method seems to have no advantages and many dangers, while the old method by pills or solution, by inunction or baths, in gradually increasing doses up to the point of commencing mercurialism, where the limit of tolerance is reached, a method sanctioned by experience, seems still more prudent and in conformity with sanitary laws.—From *Bulletin Méd.*, in the *Union Méd. et Scient. du Nord-Est*, Aug. 15, 1888.

[The disadvantages of the hypodermic method of giving mercury are many and evident, but our E. C. (probably from extreme Gallic politeness) has refrained from calling attention to the overwhelming advantage (to the doctor) of the method. This consists, and advocates of the method may deny it all they please, in the fact that by giving the drug hypodermically the patient is compelled to see the physician (and drop his fee) more frequently than by the old method.—EDITOR.]

Cappelle (P.) on the Antiseptic Action of the Neutral Salicylate of Zinc.—This salt is freely soluble in alcohol and boiling water. In cold water it makes a 4–5-per-cent. solution.

In five experiments made with a human placenta, the author finds it much more antiseptic than a 1–700 solution of sublimate or a strong carbolic solution. The zinc solution in which the placenta was placed remained clear and limpid and absolutely odorless, while the placenta took on a grayish tint and diminished in volume. On section it appeared firm while its color was unchanged, the interior being as odorless as the surface; moreover, it was not prone to decomposition, as when removed and placed in ordinary water it remained unchanged for months.—*Jour. des Sci. Méd. de Lille.*, Aug. 17, 1888.

Hot-Air Inhalations in Phthisis.—Two observers in Germany have, independently of one another, been engaged in investigations on the bactericidal property of heated dry air, and on the methods of utilizing this property for the practical treatment of phthisical patients. Dr. Weigert, of Berlin, finding that tubercle bacilli outside the body die at a temperature of 41° C., and are adversely affected by one of 38°, had constructed an apparatus for the inhalation of heated air, and commenced to make trials on phthisical patients in the early stage recommended to him by other medical men, he himself not being in practice. At first a temperature of from 40° to 60° C. was employed, the air for inhalation being quite dry. This temperature was gradually raised as high as 80° C. The patients bore this hot dry air exceedingly well, and continued to inhale it for three or four hours a day during a month, the only unpleasant effects produced being hyperæmia and dryness of the mucous membrane. The general effects are represented as having been remarkable, patients who had been falling away picking up strength and becoming quite robust, the physical examination showing at the same time that the dulness and râles had perceptibly decreased. The bacilli in the sputum, which had been very numerous, rapidly diminished in number, and finally disappeared altogether. These observations were confirmed by several other medical men. Dr. Halter, of Lengerich, Westphalia, seems to have gone even further than Dr. Weigert, he having himself inhaled, and caused patients also to inhale, dry air heated to 190° C., with satisfactory results.—*Lancet*, Sept. 29, 1888.

Pétresco on the Treatment of Pneumonia by Large Doses of Digitalis.—The author has lately treated successfully several cases of croupous pneumonia by the administration of a drachm of digitalis leaves in infusion. His formula is :

Digitalis	1 drachm.
Water	6 ounces.
Simple syrup . . .	1 ounce.

and of this he gives a tablespoonful every half hour. As a general thing the disease yields in three days, the fever, physical signs, general and local symptoms disappearing as if by magic. The mortality of the disease under this treatment has been reduced to 1.22 per cent., whereas it is usually quoted at from 7.15 to 30. per cent. Beside digitalis, he considers alcohol useless.

In some complicated cases caffeine or convallaria seemed more beneficial. In 577 observations he has never seen any toxic action of the drug.—*La France Méd.*, Aug. 18, 1888.

Ames (L. L.) on the Acetate of Lead in the Treatment of Diarrhœa.—I desire to give my experience with an old and valuable remedy, which, in the modern whirl of excitement after new remedies, seems to have been almost forgotten by the profession.

On July 27, 1888, I was called to see G. N., six months old, and I found my little patient could keep nothing on its stomach, and showing indications of extreme thirst, while its bowels were moving every hour or two, the discharges being green and very watery, and the temperature in the axilla was 103½°.

I ordered the child to be sponged with tepid water to which a little bicarbonate of soda had been added. As the head was extremely hot, cloths wrung out of cold water were kept constantly applied to it, and I prescribed :

℞	Tr. opii	gtt. xvi
	Bismuth subnit.	ʒ ii
	Mist. cretæ	f ʒ iss
	Syr. simp.	f ʒ ss

M. Sig. A half-teaspoonful once in three hours. (J. Lewis Smith's prescription.)

On the next day I returned and found my patient in no way improved, excepting that it slept more and was more quiet. I continued the prescription. July 29th, I found the child's temperature 102½°, its tongue dry and brown, accompanied by extreme thirst and frequent watery discharges from bowels. It could retain only a very small quantity of nourishment. I ordered barley-water to be given in place of water, for the thirst, and as the child did not nurse, it was given small quantities of cow's milk once in two hours and a half, to which was added lime-water. Small powders of ingluvin were given after taking milk, and the prescription of July 27th was continued. July 30th, there was no improvement ; the child's extremities were cold ; its axillary temperature was the same as before. I now ordered alcohol to be added to the baths, withdrew the bismuth prescription, and ordered one grain of salol to be given every two hours, and warm applications to be made to the extremities. July 31st there was still no improvement. August 1st, I found the child very much emaciated ; its eyes were rolled up in its head, the eyelids only partially closed, and the conjunctivæ congested ; the temperature was 102½° ; the discharges from the bowels were about the same, and the abdomen was considerably distended with gas, while the other symptoms about same as before. I now ordered cloths wrung out of hot water to be applied, to the abdomen, and the following prescription to be used :

℞	Plumbi. acetat.	gr. iss
	Tr. opii	gtt. x
	Spr. vini Gallici	f ʒ ii
	Aquæ	q. s. ad f ʒ i

M. Sig. A teaspoonful once in three hours.

I also ordered small powders of pepsin and ingluvin to be given after each time the baby took its nourishment. August 2d, I found the temperature 101°, the bowels free from gas, and that only four movements of the bowels had taken place since I last saw it, while all the symptoms showed improvement. The last prescription was now given only once in four hours, and a few drops of brandy were given between the doses, so that the infant got a little stimulant once in two hours. I also gave half a grain of quiniæ sulph. once in four hours. August 3d, I found the child's temperature normal ; that it had had only two discharges from the bowels in twenty-four hours ; that its mouth and tongue were becoming moist, and that it was showing an inclination for food. I therefore discontinued the acetate of lead prescription, but continued the quinine and pepsin. On the next day, finding my pa-

tient still improving, I prescribed a tonic of cinchona and iron, to be continued for several days, and the child has now made a perfect recovery.

A second case in which I used the acetate of lead successfully in the treatment of diarrhœa was that of a woman in the third week of typhoid fever. She had lost control of the bowels entirely, the discharges being involuntary. I had used bismuth subnitrate ten grains, with a grain of powdered opium, given every four or six hours, but it had failed to give relief. One-sixth grain of nitrate of silver was added to the other drugs without effect. Suppositories composed of ten grains of bismuth subnitrate, two grains of powdered opium, and one-fourth grain of nitrate of silver were equally useless. I then ordered :

℞ Plumbi acetat. . . . . gr. ii
Tr. opii . . . . . f℥ ss
Aquæ . . . . . f℥ iss
M. Sig. A tablespoonful once in four hours.

The discharges immediately became less frequent, the soreness left the bowels, and after the first dose of the prescription was taken the gain was steady, until now convalescence is fully established.

In closing, I beg to say that I believe many young practitioners, and some old ones, fool away too much valuable time experimenting with every new medicine that is brought to their notice by advertisements, while they leave untried the old remedies which have stood the test of years.—*Med. and Surg. Reporter*, Sept. 22, 1888.

Bright (J. T.) on the Prophylactic Treatment of Hydrophobia.—In July, 1867, I saw a child who, a few moments before, had been bitten by a rabid dog. There was a slight abrasion on the right hand, and the wound was bleeding a little. I cauterized the wound, bound upon it a cloth saturated with aqua ammonia, and gave her seven grains of carbonate of ammonia every two hours. This treatment was continued for three weeks. No symptoms of hydrophobia developed in this case. In the summer of 1875, while residing at Pleasant Hill, Mo., I saw four men and a little boy who had been bitten by a mad dog. I applied a piece of raw cotton saturated with aqua ammonia to the wounds, directing them to keep the cotton wet with the medicine. To two of them carbonate ammonia, ten grains every two hours, was given, and to the other two twenty grains of acetate potassium every two hours. They continued the treatment for three weeks. I heard from them a few months ago; all were in the enjoyment of perfect health. I did not cauterize the wounds. I believe that if the blood of a person bitten by a mad dog be rendered decidedly alkaline, and kept in this state for sufficient time, there need be no fear that hydrophobia will supervene.

The dogs that bit the patients above mentioned were known to be mad, as they had bitten a number of animals which died of rabies.—*Am. Practitioner and News*, Sept. 15, 1888.

Giddings (C. G.) on the Iodide of Potassium and Ergot in the Treatment of Meningitis.—A little girl, of nearly four years, received a fall while descending a flight of steps, striking her head over the left frontal region. A slight contusion, with a moderate amount of swelling, was noticed, but no unfavorable symptoms were observed until three days after, when the child began to complain of headache, and became drowsy. On the fourth day convulsions set in, and continued with increased frequency. As the child had partaken quite freely of nuts, her physician attributed her illness to derangement of the gastro-intestinal tract, and directed his treatment accordingly.

On the third day of her illness, and the fifth day after the fall, I saw the child in consultation. She was then comatose, with all four extremities rigid, the upper more so than the lower. The muscles of mastication were strongly contracted, so that the mouth could not be forced open. The eyes were drawn upwards and pupils contracted; abdomen sunken and tender; reflexes exaggerated.

The temperature ran from 104° to 105°; pulse, 140 to 160. As the mouth could not be opened, the following treatment was ordered.

The head was elevated; ice applications constantly to head; iodide of potassium, gr. v., with fl. ex. of ergot, gtt. xx., every four hours per rectum: Half ounce of milk, with one drachm of brandy, every hour. For the first twenty-four hours after treatment began not much improvement was made, except the convulsions, which had been as many as eight an hour, ceased, and the temperature abated some. In forty-eight hours the limbs became relaxed, and the mouth could be opened. Nourishment was

now given by mouth, with an extra five grains of pot. iodid., making ten grains every four hours.

On the third day of treatment the child partly regained consciousness. After this convalescence was rapid, and the patient made a good recovery.—*Therap. Gazette*, Sept. 15, 1888.

PATHOLOGY.

Bingham (G. A.) on a Rare Cardiac Malformation.—Albert C., æt. 4 years 11 months, convalescing from measles, and running about the room, dropped in a fit and died after a few minutes, on the evening of June 30th.

About one week prior to this I had been called to see him, and found an unusually stout lad distinctly cyanosed, breathing in an asthmatic manner, and whose rapid and violent heart-beats I was able to count *by sight*, even when he stood some distance away. Ever since he was three years old he had been troubled with "fits," sometimes two in three weeks, and sometimes once a fortnight. Before this time was a healthy boy, with no cyanosis, and no heart trouble was suspected.

There was no apparent cause for the attacks; they would come on even when he was perfectly quiet. He would cry out that he felt ill, and would then fall suddenly; would remain sensible during the attack; would scream and fight for breath. The fits lasted from ten minutes to one hour.

Seven weeks ago had a fit, during which he was perfectly insensible and stiff, with eyes open and foaming at the mouth; since that time he has appeared worse. Has only been in Canada three weeks.

On examining the heart I found a perfect babel of sounds, but among them all I detected a systolic sound which I thought to be aortic obstructive.

His finger-nails and lips were blue-black, and face and extremities mottled of the same color.

Dr. Richardson, Jr., and myself were only allowed to make a very imperfect post-mortem examination, and on the morning of July 1st we hurriedly ligated the cardiac vessels and removed the heart, which was all we were permitted to examine.

The heart as a whole was hypertrophied, especially the right ventricle.

On opening the right auricle the foramen ovale was found to be closed, except a small valvular opening on one side. In the right ventricle the columnæ carneæ were enormously hypertrophied, and there was no apparent opening into the pulmonary artery. On passing a probe down into the distal end of the pulmonary artery (which was normally patent), it was made to pass with some difficulty beneath the network of columnæ carneæ between which it was seen. There was then a decidedly limited pulmonary circulation from the right heart.

On examining the ventricle more closely, we were surprised to find up behind one of the semi-lunar valves a large direct opening into the aorta; indeed the aorta appeared to take its origin equally from the right and left ventricles. On looking into the aorta from the distal end, the interventricular wall was seen as a line forming the diameter of the cardiac orifice of the vessel.—*Canada Lancet*, Oct. 5, 1888.

Alamartine (L.) on a Case of Congenital Absence of a Sigmoid Valve of the Aorta.—A porter of 58 had enjoyed good health up to the age of 22. From that time on he had seven or eight attacks of acute rheumatic pains. During the last year he went through a rather severe attack of bronchitis, marked by much dyspnœa, recovery being incomplete, but sufficient to allow him to resume work. Two weeks before admission to the hospital his dyspnœa increased, painful palpitation, vertigo, and œdema of the legs came on. He was found to have a very distinct diastolic bruit, loudest at the base. A rather soft systolic bruit was heard at the apex, and louder at the epigastrium. The pulse was full, compressible, and regular. Numerous sonorous râles were heard at the base of both lungs, and large moist râles at the base of the right. The urine, of normal quantity, contained a marked amount of albumen.

The patient gradually got worse, and died twenty-two days after admission.

An autopsy revealed pulmonary congestion and œdema, with hepatization of the lower third of the right lung.

The right auricle was dilated to five or six times its normal size; the right ventricle was small and had thin walls. The pulmonary orifice was dilated, being 1¾ in circumference, but the valves seemed normal. The aorta was atheromatous, the

sinuses of Valsalva were dilated, and the aortic orifice was closed by only two enormous and thickened valves: the anterior being 1¾ long, and the posterior one being 1¼ long. There remained no trace of the absent valve. The coronary arteries opened below and about opposite the middle of each valve.

There were some calcareous deposits on the free borders and at the base of the valves. The mitral valve was slightly insufficient, probably from dilatation.—*La Loire Méd.*, Aug. 15, 1888.

Firket on Syphilitic Alterations of the Cardiac Valves.—A woman of 53 was found to have a systolic murmur at the apex; albumen and hyaline and granulo-fatty casts in her urine. All her extremities were œdematous, and there was considerable ascites. An autopsy revealed amyloid degeneration of the kidneys, spleen, and mitral valve, the last condition having given rise to thromboses. In the right lobe of the liver were syphilitic gummata in the stage of retrogression. No other lesions of syphilis were found.—*Le Scalpel*, Aug. 26, 1888.

Dalton (H. C.) on a Case of Thrombosis of Brachial Artery at Its Bifurcation, with Paralysis of Arm and Sloughing of Cuticle; Recovery.—A man while driving a wagon, and lying on the seat leaning on the left elbow with arm strongly flexed, and head resting on hand, felt a tingling sensation in fingers, and an agonizing pain extending from the middle of the arm to the tips of his fingers; his hand became pale and shrivelled. He described the pain as a "bone-breaking pain." The arm was completely paralyzed both as to motion and sensation.

The paralysis continued for twenty-four hours, when slight motion returned.

When admitted to hospital, two days later, the following condition was noticed.

The hand, forearm, and lower half of arm, was of a dark bluish color, the line of demarcation between the discolored and normal skin being quite pronounced, the discolored part being elevated above the normal cuticle to the extent of a quarter of an inch or more. The affected cuticle presented a shrivelled, or goose-flesh appearance, and was somewhat indurated. Pins stuck at any point into the forearm gave no pain. The motion of the arm was very limited; when he wanted to move it, he would lift it with the right hand. The pain was very severe and almost constant in spite of large doses of morphine. The arm was cold and somewhat clammy. The pulse could not be traced lower than the bifurcation of the brachial artery; the pulsation being extremely feeble between this point and the line of demarcation. The cuticle over the dorsal surface of the hand and wrist and inner surface of the forearm was very dark. A remarkable feature of the case was that the pulse, temperature, and respiration were normal; pulse in fact being rather slow, 66 per minute.

Another peculiar feature was the short length of time it took to produce the thrombosis; he was positive that he was not leaning on the arm more than two minutes.

His family history is as follows:

His grandfather, grandmother, and an uncle died of hemiplegia; his mother died of phthisis pulmonalis. He has always enjoyed good health with the exception of rheumatism three years ago, since which time he has been entirely free from it. He has used alcoholic stimulants rather freely for the last three years.

Later, almost the entire cuticle on inner surface of forearm and the dorsal surface of hand sloughed. The function of the arm, however, became fully re-established, motion and sensation being perfect.

The treatment adopted was enveloping the arm, forearm, and hand in a large quantity of absorbent cotton, dipped in a two and a half per cent. solution of carbolic acid. Over this guttapercha tissue and a bandage were placed.

The progress toward recovery was steady and uninterrupted.

The pulse did not return at wrist until eleven days after the injury.—*Weekly Med. Rev.*, Sept. 22, 1888.

Warner (F.) on Cerebral Syphilis: Two Cases in One Family.—M. P. contracted syphilis in 1868; he married in 1869, and is said to have lost all secondary symptoms in 1870. The first of the mother's eight pregnancies resulted in a stillborn child; then followed a child who died in convulsions when three months old; Henry was born in 1874; the next survived but one day; Percy born 1876; and three younger children who appear to be healthy, except one boy now aged seven, who still wets the bed.

Percy was brought under my care in 1883. He was fairly well developed, but the epicanthic folds were pronounced; he

was pale, flabby, and his skin felt cold, while his fingers were blue; no heart defect was discovered. His eyes appeared normal on ophthalmoscopic examination; no defects were seen in his teeth, and no scars could be found about the mouth or anus. Speech was very indistinct; he could only partially feed himself; he slept well and was clean in habits. Walking was clumsy, with irregular movements, and he often fell accidentally. The knee-jerks were rather increased; all these conditions were bilateral. As an infant, he was jaundiced and had "snuffles," with raised and moist sores at the anus and mouth; they yielded to treatment in a few weeks. During teething ulcers appeared on the body and buttocks, lasting twelve months. It is probable that the boy never walked or talked well, but from four to six years of age he attended school, and though he learned nothing, was thought to be healthy. He never had any fits. In 1883 he began to suffer severe head-pain, which came on in attacks with vomiting, such attacks becoming more frequent and attended with loss of control over the bladder. Mercurial treatment was employed without success. He soon had to leave school, being unable to walk there; headache and vomiting continued, and I have heard that he died in 1887 without the supervention of any fresh signs of importance to the case.

Henry P. appeared healthy at birth, and there is no history of the manifestation of the signs of syphilis in infancy; still we may infer that he was syphilitic from the history, the incisor teeth, and the brain disease. At six weeks old, bilateral convulsions set in, and continued at intervals till he was six years of age, when they stopped. When nine years old he gradually became clumsy and dropped things. In 1882 he had a severe illness, and for six months was said to have "meningitis." There was a temporary squint and severe head-pain, with universal powerlessness. He gradually recovered general power, but hemiplegia of the left side remained. When I saw him in 1883 there was complete left hemiplegia, with rigidity and athetoid movements of the fingers. The left face was partially paralyzed. To sum up further notes to present date: traces of old optic neuritis exist, and the left upper incisor is defective, probably from infantile syphilis. The left pupil reacts well, but the right is larger than the left; it is inactive to light, but contracts slightly on accommodation. No keratitis. Left knee-jerk is exaggerated, the right normal. He is intelligent, and reads well, and has no head-pain. Mercury has been fully used, but no marked improvement has occurred. I last saw him two months ago, and his condition was practically unchanged. The left hemiplegia and the condition of the right pupil seem to indicate probable double lesion.

These brothers appear to have suffered from syphilitic disease of the brain. It seems probable that there was some slight defect from birth in each case. Percy learned nothing at school, and Henry had a long series of fits in early childhood. In Percy the lesion was bilateral; in Henry there appears to be a double lesion, though each may have been more local than in his brother. The case of Percy was possibly a chronic meningitis similar to the case published by Dr. Fletcher Beach and myself in *Brain* (April, 1888), where a thick false membrane had grown over the convolutions and pressed upon them. In these two cases, as well as in that previously published, mercurial treatment was employed without success.—*Brit. Med. Jour.*, Sept. 29, 1888.

Weill on Meningitis with Tubercle in the Uterus.—A girl of 17, who had never menstruated, entered the hospital complaining of intense headache and pains in the loins, which had lasted fifteen days. There came on paresis of the right arm and later of the left leg; face intact. There was right hemianæsthesia. On the sixth day rigidity of the back of the neck, paresis of both legs, and constipation appeared. On the tenth day she died, with trismus and conjugate deviation of the head and eyes to the left.

An autopsy revealed a tubercular meningitis confined to the convexity of the left hemisphere, and consisting of caseous patches located about the foot of the three first frontal convolutions, the base of the ascending frontal and superior parietal lobule. The white substance was quite deeply softened, and at the rear of the same hemisphere was a small tubercular tumor. It was found that the entire mucous membrane of the body of the uterus was transformed into a caseous tubercular mass.—*Lyon Méd.*, Sept. 16, 1888.

Pellier on Orchi - Epididymitis from a Strain.—A porter of 45, when go-

ing down stairs with a load of small packages which obstructed his view, went down the last two steps at one step, and made a violent effort to retain his load. He was at once seized with a pain in his right groin so severe as to make him cry out. More or less pain continued for three days during which time he was unable to work. At that time an examination of the parts revealed a swelling of the right epididymis which was tender on pressure. The spermatic cord on that side was painful, indurated and continuous with the epididymis in the form of a resisting tube. A sensation of tension was present in the inguinal canal, where the skin, without redness, was slightly swollen. The pains had spread even to the lumbar region. The testicles were suspended, a resolvent salve ordered, and three leeches applied over the inguinal canal. All the symptoms became aggravated, and the testicle itself became swollen and painful. A deep-seated, smarting pain during micturition developed. Resolvent compresses, enemas, and leeches were employed. On the 15th day improvement set in and the local inflammatory symptoms abated.

Two months after the onset of the disease the right glandular mass remained larger than the left, the testicle was indolent, the epididymis was slightly sensitive to firm pressure, but there were no irregularities or nodes. The vas deferens was not quite normally supple.

Rectal touch revealed nothing abnormal about the seminal vesicles or prostate.

The patient had no individual or hereditary tubercular taint, nor had he any syphilitic or gonorrhœal disease. — *L' Union Méd.*, Sept. 6, 1888.

Tiffany (L. McL.) on Pregnancy and Operative Surgery: Their Mutual Relations.—The following conclusions were presented: 1. Pregnancy is a physiological condition, and does not contra-indicate a surgical operation. 2. During pregnancy temporary strain may be exerted on some organ—*e. g.*, kidney, inducing impairment of function. 3. A surgical operation upon a pregnant woman is to be conducted so as to avoid inducing abortion, in itself a serious accident. 4. The main cause of abortion after operation is sepsis. 5. The probability of sepsis after operation is increased if the patient is suffering from disease, either temporary or chronic. 6. Abortion may result from operation—shock perhaps. 7. Hemorrhage does not seem to produce abortion. 8. Union of fracture may be retarded by pregnancy. 9. Recorded cases show that the unborn child receives no evil impress when the mother is subjected to operation. 10. When a surgical operation upon a pregnant woman is under consideration, the function of all the patient's organs must be carefully investigated and regulated. An operation then conducted antiseptically may be expected to result as though pregnancy were not present.—*Med. News*, Sept. 29, 1888.

Hallé and Albarran on a Pyogenic Bacterium and Its Rôle in Urinary Infection.—This organism is found chiefly in pathological urine, either alone or accompanied by other micro-organisms. The authors have found it seventy-eight times in 79 autopsies in the urine of the pelvis of the kidney; it is also found in the vesical walls, in urinary abscesses, and in the substance of the kidney. It is never found in healthy urine even on autopsy. Inoculated in animals, it reappears in their abscesses and in their urine.

It is a polymorphous bacterium, mobile, easy to color and cultivate in various media, not liquefying gelatine, upon which it produces a white culture of considerable thickness. The experimenters conclude this bacterium is pyogenic and infectious, frequently alone in the urine of so-called urinary patients, in whom it produces cystitis and pyelitis. In attacking the kidney it produces the various lesions of infectious suppurative nephritis, spreading directly from the pelvis to the renal tissue as an ascending nephritis, or, carried by the blood, it becomes localized in the cortical substance. Introduced into the circulation, it produces a septicæmia which is acute, subacute, or chronic, and often fatal. The part this organism plays in infection should emphasize the necessity of strict antisepsis in all operative procedures about the urinary passages, even catheterization. This same micro-organism has been found in abscess of the broad ligament.—*L' Union Méd.*, Aug. 23, 1888.

A Remarkable Post-mortem. — In a recent number of the *Wien. med. Presse*, Dauscher records the notes of the following remarkable case. A man, æt. 35, was suddenly thrown down by a mass of earth, which fell from a height of about 16 feet. It struck him upon the back, covering first his feet, then his legs and abdomen, and lastly the thorax, leaving the head and

neck free. Workmen at once proceeded to extricate him, but death had taken place before this could be accomplished. At the autopsy the author was surprised to note a large swelling, about the size of an adult skull, in the neck, and extending towards the right shoulder. Upon examination this swelling proved to be the two lungs and the heart, which had been thrust through the upper wall of the thorax. Beyond this the man exhibited no further signs of injury. The abdomen, however, was greatly depressed, and on laying it open the viscera were found to have been displaced into the thorax. The diaphragm was ruptured in several places, and notably around its attachment. The thorax was almost completely filled with the abdominal organs. The spleen and liver were both ruptured, but neither the stomach nor intestines had received any injury. The heart was small, the large vessels and trachea were unwounded, the lungs collapsed, and brain and cranium normal.—*Medical Press*, Sept. 12, 1888.

MISCELLANY.

Leighton (N. W.) on a Case of Ruptured Diaphragm and Death by Apnœa; the Stomach and Spleen Occupying the Left Thorax.—On Sunday, March 4, 1866, I was called in haste to see Mrs. N., æt. 28 years, who was suffering with severe pain in the epigastrium, nausea, and dyspnœa. There was an expression of countenance indicating pain and fear. I learned that she was in her usual health in the morning; had been to church; and had taken her dinner two or three hours prior to my visit—a part of which consisted of fried scollops. I came hastily to the conclusion that she was suffering with colic in consequence of embarrassed digestion. Preparing a dram of powdered ipecacuanha in a goblet of warm water, I directed her to swallow it at once. She said that she could not swallow. I said that she could, and that she would be relieved in a short time. She then made several attempts, only taking one or two swallows at a time and spitting it out. Thinking that the taste of the ipecacuanha aggravated the nausea and increased the difficulty of swallowing, I tried soda in warm water, and peppermint, and clear warm water, all without avail. Believing that the dyspnœa was due to gaseous distention of the stomach, and the dysphagia and other nervous manifestations to hysteria, I left my patient, urging the friends to persist in having her try to swallow a stronger mixture of ipecacuanha, and promising to return in half an hour. I returned, possibly in less time than specified, prepared to administer ether for the relief of the pain and to induce emesis; but my patient was dead. A post-mortem examination was performed about twenty-one hours after death. I found an opening in the diaphragm, on the left side, through which the stomach and the spleen had entered the left thoracic cavity. The stomach was distended, filling the entire cavity, except the spaces occupied by the spleen below and the left lung above, where it was compressed into a mass about the size of a large orange. The heart was pushed to the right of the median line. The walls of the stomach were tense by the pressure of gas within them. The stomach also contained the partially digested meal taken a few hours before her death. Other organs of the thorax and abdomen appeared healthy. The opening through the diaphragm was sufficient to admit my four fingers into it, side by side. The edges of the ruptured muscle were thickened and rounded, as if healed a long time before the fatal occurrence. Information was elicited from her husband after the examination, that she had a very severe labor about seven years before, and that she "felt something give way" during the last labor pains; that she had had numerous attacks of colic and of indigestion with nausea, but was never able to vomit. He also told me, as the patient herself, that she never vomited.

Pregnancy did not occur after the parturition referred to. It was concluded that the rupture occurred during parturition; that it had not been the source of any great inconvenience, except the inability to evacuate the stomach when nausea and embarrassed digestion required it; that during the fatal attack, the stomach, by its muscular movements or by its distention with gas, was forced through the ruptured diaphragm, and continued to expand till it forced the diaphragm downward, dragged the spleen into the thoracic cavity, pushed the heart to the right of the median line, and expelled all the air from the left lung. To what extent the displacement of the organs had taken place at death I do not

know, but have no doubt about the entrance of the stomach into the thorax after her last dinner and before her death.—*Gaillard's Med. Jour.*, Oct., 1888.

Gow on Passage of Gas and Fæces through the Urethra; Colotomy; Recovery; Remarks. — W. J., aged thirty, first noticed pain in the hypogastric region about eighteen months ago; this was felt before passing a motion, never at any other time. This pain became worse, sometimes lasting the whole day. For some months prior to admission he had passed blood and slime with his motions. For the last few weeks the urine has been thick, and passed with much scalding pain; during the same time he has noticed flatus pass by the urethra.

Present condition.—A fairly healthy-looking man. Complains of constant dull aching pain in the pubic region. He requires to pass urine nearly every quarter of an hour, and after the urine is passed flatus often escapes with considerable noise. The urine varies in character; it is generally turbid, having an abundant yellowish granular precipitate, with distinct fæcal odor. Under the microscope the deposit is seen to consist of pus cells, vegetable fibres, and granular débris. The amount of fæcal material in the urine is always greater when the bowels are loose. The motions are semi-solid, and urine is not passed by the rectum. The patient complains greatly of flatulence, and says he feels it descend into the left iliac fossa, where it seems to stop, and escape into the bladder. Nothing definite can be felt either through the abdominal wall or by the rectum.

For some weeks the patient was kept at rest in bed on a milk diet, with ten grains of compound soap pill at night, no material improvement following. Mr. Harrison Cripps, after consultation, decided to explore the abdomen, and open the bowel above the seat of communication.

The abdomen was opened by a two-inch incision in the left inguinal region. A search was then made with the finger, and a firm mass suggestive of malignant disease discovered binding the sigmoid flexure to the bladder. The bowel was traced upwards from this, and a loop of the lower part of the descending colon drawn out and carefully united to the parietal peritoneum and skin. The bowel was opened on the fourth day; the wound healed rapidly, and the patient left the hospital within the month. From the time of opening the bowel neither air nor fæces passed into the bladder, and the urine became clear, the cystitis disappeared, and the patient expressed himself as greatly relieved. When last seen, three months later, he still continued well, the artificial anus giving very little trouble.—*Lancet*, Sept. 29, 1888.

Cheever (D. W.) on Shock.—At the close of an admirable paper on the above subject this author concludes by asking: What can we do to prevent or diminish shock?

1. Wait for reaction.

2. Never neglect to calm those suffering mental shock by a cheerful word and personal presence.

3. Give alcohol, either spirits or wine, a quarter of an hour before the anæsthetic.

4. Make the anæsthesia short; never begin it until every thing is ready; suspend it during the less painful dressings. Consciousness returns *tardily*. We keep up the anæsthetic longer than is necessary.

5. As rapid an operation as can prudently be done.

6. As short a dressing as is practicable.

7. As a cardinal point, avoid *chilling* the patient.

To promote reaction after operation:

1. Persistent and *carefully* applied *dry* heat. (Be *over*-careful about accidental burns.)

2. Liquid nourishment, combined with stimulant and a little laudanum, by enema.

3. Subcutaneous injection of brandy.

4. Aromatic spirits of ammonia by the mouth. Champagne is sometimes retained when other things are rejected.

5. Black coffee and brandy, the stimulant *par excellence*, when it can be retained on the stomach.

6. Quiet; a horizontal, or more than horizontal position; sleep; assurance that all is over, and doing well.—*Boston Med. and Surg. Jour.*, Sept. 27, 1888.

Fisk (S. A.) on Spontaneous Fracture of a Rib.—Mr. X., thirty-two years of age, was sitting after luncheon sideways on his chair, with his legs crossed, and with his right arm over, and his hands clasped on the back of the chair, when, on giving a sudden violent cough, he heard something snap, and felt a sharp, piercing pain in his side. He was put to bed, and an examination revealed a transverse fracture of the tenth rib on the right side, situated about one-third of its length from the spine.

There could be no doubt of the existence of a fracture, for the ends of the bones could be felt grating over each other, and the patient could feel the same himself on taking a deep inspiration, or on motion.

The patient is a young man, vigorous and active. To be sure he has had serious lung trouble, for which he came to Colorado. For the past five years he has been the subject of diabetes insipidus, voiding some twelve quarts of urine per day; and in the same time he has had two severe attacks of acute inflammatory rheumatism. He is, nevertheless, in good flesh, actively engaged in his work, and is, to all appearances, in perfect health. It seems more reasonable to attribute the fracture to a sudden violent muscular strain put upon a rib which was fixed by the tension of the muscles of the back, from the position in which the patient was sitting, than to attribute it to any atrophic wasting or change in structure.

For the first twenty-four hours the pain was intense whenever the patient moved or coughed, but as the ends of the bones softened the pain diminished, and the greatest inconvenience came from the flannel bandage which he had to wear, and which was kept on day and night. This bandage was worn two weeks, the patient all the time going about his work. With this exception the treatment was *nil*, although more pain was probably experienced from the fracture of this rib than would have resulted from that of any other, because it received no support from the adjacent ribs, and so had freer play.—*Boston Med. and Surg. Jour.*, Oct. 4, 1888.

Zinke (E. G.) on a Peculiar Case of Retention of Urine.—A lady seemed to be threatened with premature labor about the seventh month. On this occasion she was attacked so suddenly with severe pains that a neighboring physician was called, who feared that the woman would miscarry, and subsequently informed the relatives that operative interference might become necessary to remove the fœtus.

The writer found the abdomen distended and extremely tender to the touch. A tumor simulating a seven months' pregnant uterus was present. It was slightly movable, absolute dulness on percussion, no fœtal heart-sound, no placental bruit, no fœtal movements. The entire pelvic cavity was found to be filled with a solid tumor. No fever. Pulse rapid. Skin moist. Upon inquiry the speaker found that the patient had passed urine but one hour ago. He was on the point of sending for additional advice, when it occurred to him to introduce the catheter, notwithstanding that urine had been passed regularly. Then the cause became evident. About three-fourths of an ordinary bucket was filled with the urine withdrawn. The abdomen collapsed. A retroverted pregnant uterus (three to four months) was found, and was easily returned into the abdominal cavity by putting the patient in knee-elbow position, dilating the vagina, and with the fingers pushing the organ upward and forward.

The following morning the same condition supervened, the uterus returning to its retroverted state and obstructing the passage of urine by pressure upon the bladder. Bladder was again emptied, and the uterus returned in the same manner as the day before. Since then the organ remains in its normal position. No abortion occurred, and the patient is now in the seventh month of gestation.—*Cincin. Lancet-Clinic*, Sept. 22, 1888.

Sims (H. M.) on a Vesical Calculus with a Cotton Nucleus.—I was called in consultation to a patient about 40 years of age, a sufferer from chronic cystitis for three years past. The patient was then under the treatment of a lady physician, who had washed out the bladder three or four times a day to overcome the disagreeable odor. On arrival I explored the bladder with the sound and detected a stone which I proposed to remove at once, and the patient consented. The stone was crushed without the use of anæsthetics, because the patient had eaten a hearty dinner and I did not dare to give ether. She bore the operation very bravely. After the stone had been crushed and taken out piecemeal, I introduced the forceps and found a soft substance which I thought was a sloughing polypus. I cut off one end of it with scissors and found it was nothing but a piece of cotton coated with a phosphatic deposit which had formed the nucleus of the stone. I do not know how the cotton got into the bladder. The patient had been under treatment in a hospital for cystitis, and she remembered that the bladder was swabbed out. It may be that the cotton came from the probang and was lost in the bladder. Since the operation the patient has done well.—*Am. Jour. Obstetrics*, etc., August, 1888.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of

CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital; CONDICT W. CUTLER, M.D., Instructor in Diseases of the Skin, Post-Graduate Medical School, New York; JOHN S. HAWLEY, M.D., Attending Gynæcologist, New York Hospital, Out-Patient Department; FREDERICK PETERSON, M.D., Lecturer on Nervous Diseases at the New York Polyclinic.

VOL. V., NO. 43. October 25, 1888. WHOLE NO. 91.

CONTENTS.

	PAGE
Leading Article	509
Pathology and Medicine	512
Surgery	517
Miscellany	519

LEADING ARTICLE.

The Treatment of Organic Heart-Disease.—Among the most valuable advances of medical art of the last few years has been the more general recognition of the fact that many cases of defects of the cardiac valves require no treatment at all. The paper of Sir Andrew Clark, read last year before the British Medical Association, must be ranked among the most valuable contributions to this subject. The paper speaks of 684 cases seen by the author in thirteen years, in which there was no evidence that cardiac lesions, all of which had existed for over five years, were producing any ill effect. Most of these cases were instances either of mitral regurgitation, or aortic obstruction. He stated also that mitral regurgitant murmurs so often encountered in chorea, for the most part disappear within eight or nine years of the attack, and that the clinical evidence of rheumatic valvular inflammation and their effects also sometimes pass away, for the most part in young subjects, but sometimes in the middle-aged. Several well known authorities, in the discussion of this paper narrated a number of cases in support of the view that the prognosis of a very large percentage of valvular disease of the heart was much better than has been generally supposed. This more hopeful aspect of the matter is one that ought to be widely circulated among the laity as well as among physicians. In the above-quoted paper, cases are cited in which the health first began to suffer after patients were told by their physicians that they had heart-disease. Such deplorable results will probably be less frequent in the future, when patients fully appreciate the fact that the existence of "heart-disease" does not necessarily imply liability to sudden death, or even any grave probability of shortened life or impaired usefulness.

The effect of a better acquaintance with the natural history of valvular defects on the part of physicians will be no less valuable also in preventing over-treatment. As a supplement to the above-quoted paper, that of Dr. J. Mitchell Bruce, in the *Practitioner*, of January, 1888, on "Failure of the Heart in Valvular Disease," may well be read by any one desiring to place himself abreast of the most modern therapeutical views. Dr. Bruce very justly calls attention to the fact that when symptoms of failing compensation have once manifested themselves, many practitioners regard rest and tonics as the routine things to be prescribed. While recognizing that there is a limit beyond which the cardiac compensation cannot be carried under the most favorable circumstances, yet he lays great stress upon the necessity of studying each case as it presents itself, to ascertain whether or not there are some factors present other than the valvular lesions which have caused the heart failure. These factors he arranges as follows: 1. Valvular overwork. 2. Nervous causes. 3. Imperfect blood supply to the heart from (*a*) impoverishment of the blood from anæmia, hemorrhages, discharges, dyspepsia, actual starvation, etc., or from the opposite condition of too much food and too little exercise, or from (*b*) dis-

ease of the coronary arteries. 4. Intercurrent diseases, especially rheumatism and lung diseases. 5. Causes peculiar to women (pregnancy, climacteric, etc.), 6. Cardiac poisons, especially tea, coffee, tobacco, and alcohol. 7. Increase of the valvular lesion, as from rupture of a valve from strain or fresh endo-carditis. In any one case several of these factors may of course be combined. The prognosis of a given case will depend very largely not only upon the location and extent of the lesion, but upon the possibility of setting aside the accessory factor or factors which render the heart muscle incompetent. In his short summary of treatment Dr. Bruce very justly lays very great stress on the meeting of the indications furnished by the accessory causes of heart failure, and of carefully limiting the well-known measures at our command, which enable us to temporarily reduce the blood mass, lessen peripheral resistance, and stimulate the heart itself, in appropriate cases.

In the *Liverpool Medico-Chirurgical Journal* of July, 1887, Dr. James Barr publishes a suggestive article on the treatment of mitral stenosis. He speaks very highly of nitro-glycerine and atropia $\frac{1}{100}$ to $\frac{1}{60}$ of the former, and gr. $\frac{1}{100}$ to $\frac{1}{100}$ of latter, separately or together, repeated according to the effect. Dr. Barr prides himself on giving satisfactory explanations of his results and on the reasons for the presence or absence of certain symptoms in patients with mitral stenosis. He states in one place that venous engorgement, preventing a free outlet through the capillaries and arterioles, and the contraction of the arterial tree, owing to the small amount of blood in the arteries, raises the arterial tension. Six pages further along he says: "There is usually very little anasarca, because there is no extra blood or excessive pressure in the systemic capillaries." It does not seem to occur to him as singular that venous engorgement can, if both these assertions are true, give rise to increased tension in the arteries without causing excessive pressure in the capillaries.

This is an extreme example of Dr. Barr's "rational" explanations, but they manifest a tendency, not at all infrequent in current literature, to base important deductions on exceedingly crude and superficial consideration of the physics of the circulation.

Dr. Barr speaks of the good effect of bleeding in cases of extreme embarrassment of the right heart, an old procedure again being strongly recommended by many authorities. He condemns, however, bleeding from the arm, on the ground that the blood so drawn simply depletes the already too empty arterial system, and is more likely to hasten than retard the death of the patient. He recommends direct aspiration of the right ventricle, or withdrawal of blood by bleeding from the hemorrhoidal veins, or from the portal system by aspiration of the liver. While these objections to the more generally recommended phlebotomy from the arm have some plausibility, yet it does seem unwarrantable for Dr. Barr to absolutely condemn a procedure recommended by so high an authority as Dr. Broadbent (quoted by Dr. Barr in his paper), on purely theoretical grounds. The possibility of doing irreparable damage to the heart by puncture of the right ventricle seems a much greater danger than that of fatal syncope from too sudden lowering of the blood pressure in the brain by bleeding from the arm. A case has been mentioned to the writer in which an abscess was formed in the track of an hepatic puncture, which was apparently caused by it. It is true, however, that aspiration of the heart has been done with impunity, and that with proper antiseptic precautions puncture of the liver may be attended with little danger. The good effect of the bleeding comes, however, from a temporary lessening of the work of the heart by a temporary diminution of the mass of blood. As far as relief to the right heart is concerned, it is difficult to see how withdrawal of blood "directly from the inferior vena cava" by way of the hemorrhoidal veins relieves it any more than preventing an equal amount of blood from getting into the superior vena cava by the brachial and innominate veins. Removal of the blood from the portal system certainly seems safer than from the anus, because the procedure would apparently have a less immediate effect on the blood pressure in the cerebral arteries. But does the blood removed from the hemorrhoidal veins come any more from the inferior vena cava than the blood from the basilic from the superior, and, if so, is it true that bleeding from the inferior vena cava has any less effect on the blood pressure in the cerebral arteries than bleeding from the arm?

The good effect of lowering the mass of blood by saline cathartics and by restriction of the amount of fluid is insisted upon. The writer has seen great benefit from giving sulphate of magnesia dissolved in a very small quantity of water, *i. e.*, half an ounce of the salt in two ounces or less of water, as recommended by a Scotch writer whose name he cannot recall, some years ago. In restricting the amount of fluid, however, as a matter to be enforced for a long time, due attention should be paid to the danger of interfering with general nutrition by a too rigid enforcement of the restriction.

In a clinical lecture on the therapeutics of heart disease, published in the *Lancet*, July 30, 1887, Dr. Thos. Oliver endorses the use of belladonna, adds his tribute to the value of stropanthus, sulphate of sparteine, and barium chloride, and calls attention to the fact that caffein not infrequently causes great irritation of the stomach. In the experience of the writer, when caffein is not well tolerated it causes more intense gastric irritation than any other remedy of its class, and it is best to forewarn patients who have never taken it of the possible results of its administration. Dr. Oliver calls attention to the good prognostic significance of high arterial tension in aortic regurgitation. The obvious reason for this is that arterial tension cannot be high in cases of this lesion in which the leakage is great. If there is a good dicrotic wave in the tracing or a gradual decline in the tracing, except under certain exceptional conditions when compensation is failing, the leakage must be slight. When the summit of the wave is broad, but the tracing falls off steeply when the ventricular systole is over, it is obvious that, although the leakage is great, the ventricular contraction is strong and prolonged. It is in estimating the amount of regurgitation which an aortic regurgitant murmur represents that the sphygmograph is of peculiar value in cardiac disease. Due allowance must, of course, be made for the fact that atheroma of the aorta may have as marked an effect in suppressing dicrotism and causing a rapid falling off of the arterial tension after the ventricular systole as aortic regurgitation.

Dr. Oliver has also a good word to say for the "abstraction of blood from the arm, in cases of over-distension of the right ventricle, where the jugular veins are swollen, the face livid, the pulse small, and the dyspnœa urgent, to the extent of from eight to ten ounces . . . with, in most cases, almost immediate relief to the breathing, improvement of the pulse, and with increased comfort to the patient." If he cannot get blood from the arm he utilizes "any very distended vein at a reasonable distance from the heart." Mercurial purgatives are commended. Paraldehyde in doses of from 15 to 30 grains and urethan in doses of "from 10 grains upward" have proved valuable as hypnotics in cardiac cases.

The general verdict of those who have written on stropanthus during the past year is very favorable. Its general utility as a cardiac tonic is even placed above that of digitalis by some writers. Its superiority in some cases seems to be due to its stimulating the heart without causing contraction of the arterioles, a peculiarity which would seem to commend it for use in failing heart resulting from high arterial tension, as in many cases of Bright's disease.

Sparteine seems to have given by no means such uniform results. Its peculiar advantage is said to be rapidity of action. It is pretty definitely settled that whatever diuretic action it may seem to have is secondary entirely to its effects upon the heart.

The chloride of barium is said to act very much like digitalis. Brunton speaks of it as being one of the most powerful excitants of the peripheral arteries. Oliver is the only author who has written about it, as far as has fallen under our observation, as a cardiac excitant. He states that from half-grain doses morning and evening, several of his cases of aortic regurgitation had "their pulse-ratio reduced, the pulse rendered fuller and firmer, and the amount of urine increased." He states that its action as a cardiac tonic is indirect. The drug seems not to have excited any general attention.

For failing heart in acute infectious diseases stropanthus, caffein, and sparteine are well spoken of on account of the rapidity of their action. It seems probable also that atropia might be with benefit more generally used for this purpose than it seems to be, it being especially adapted for hypodermatic injection.

Valuable as the new cardiac remedies may prove themselves to be, there is some danger lest in the desire to test them the

important principles laid down in the above-quoted paper of Dr. Bruce may be lost sight of. The method of treating failing compensation which has been practised by Oertel, is the most striking departure from the more general abstinence from exercise and reliance on drugs. The fundamental principle of this method is that the disturbed compensation is to be restored by exercising the heart. This is accomplished by making the patient walk up hill, the length of the walk and the steepness of the ascent being carefully graduated according to the requirements of the individual case. Oertel claims that the up-hill walk acts differently from the same amount of exertion on the level, or by gymnastic exercises. Patients are, he says, less embarrassed in walking up a slight incline than in walking on a level, because the more powerful demand upon the heart which the effort of ascending causes, stimulates the heart again to more powerful contraction. Combined with the exercise is a strict regulation of the diet, the chief object of which is to reduce the work of the heart by restricting the amount of fluid taken.

This method has not failed to secure condemnation from other authorities. In a discussion before the German Congress für innerer Medecin in 1887, Leyden speaks of its possible dangers. He states that the exact varieties of cardiac embarrassment in which the method is of use have not yet been differentiated with sufficient care. Dr. Schott stated that he had seen patients who had been injured by the method, although treated by Oertel himself. Similar warnings have been published by other authorities. It has probably been within the experience of every physician to see cases in which a single over-exertion even of a comparatively trifling character, has been the turning-point in cases of valvular disease, in which the compensation was on the point of failing. It is not surprising, therefore, that in improperly selected cases the method should prove disastrous. Leyden, in the above-cited discussion, called attention to the fact that Stokes had long ago recommended gymnastics and mountain climbing for heart cases, but that this form of treatment remained in vogue for only a short time.

By many writers the Oertel cure has been regarded as a method applicable to cases whose general nutrition needs demand special attention to muscular exercise either from defect in their general habits in this respect, or from restrictions mistakenly imposed upon them by their medical advisers. When a man with healthy organs exercises too little and eats too much, the reason of his discomfort is apt to be evident even to himself. When, however, a man with a heart murmur does the same thing with the same result, his medical attendant is apt to suspect failing compensation and make matters worse by heart-tonics, restricted exercise, and large amounts of easily digestible food, when some tramps over the hills on a diet of pork and fried ham would be of positive benefit.

To the writer it seems that the superiority that Oertel claims for mountain climbing over other forms of exercise may lie in its calling forth deeper respiratory acts. A habit of superficial breathing is readily formed by people who lead sedentary lives, or who exercise only by moderately rapid walking on the level. Aëration of the blood is effected with less cardiac effort when the whole pulmonary surface is employed, than when a large portion of the lung is practically disused owing to a habit of superficial respiration. In a case quoted by Franz in his paper, which opened the above-mentioned discussion, as an evidence of the great value of the Oertel method, treatment was commenced by practice in deep breathing without other exercise. From some recent experience of his own the writer is led to conclude that this hint is a valuable one, and points out a way of securing the good results of the Oertel method without its attendant risks.

R. VAN SANTVOORD.

PATHOLOGY AND MEDICINE.

Anderson (J. A.) on a Case of Aneurism of the Aorta Perforating the Pulmonary Artery.—A blacksmith, æt. 33, was admitted on 11th May, 1888, with the complaint of pain in the left side of his chest. His family history, so far as he knew it, was good; and as regards his own history, and having reference to the present illness, he had an attack of inflammation of the lungs thirteen years ago; he had been troubled with winter cough for the last three winters; he never had rheumatism in any form; there were no evidences of his having had syph-

ilis, but he had been very intemperate in the use of alcohol. He was not conscious of having strained himself at any time, though he was wont to perform feats of strength in the form of lifting weights, etc.

He had been perfectly able for his work until a month prior to admission; though he admitted that during the last year he had been scarcely so strong as he used to be. On that date (11th April) the pain in the chest commenced; it became so severe in a few days as to prevent him from working; it was that which caused him to seek advice, and it was virtually the only symptom he complained of on admission.

When examined in bed, we found the chest to present these signs: 1. A prolongation of the left border of cardiac dulness downwards and to the left, reaching slightly to the outside of the nipple line at its lower extremity; an extension of the upper border upwards, so as to correspond with the lower border of the second rib; and the right border in the mid-sternal line. 2. A marked pulsation and accompanying thrill in the third left intercostal space. 3. An exceedingly loud and long v. s. murmur of a blowing character, audible over the whole cardiac area, loudest in the pulmonic area, distinctly less loud at the apex, much less loud at the aortic cartilage, audible in least degree at the left sterno-clavicular articulation; this murmur was distinctly heard also at the middle of the back on each side of the spinal column, but more distinctly on the left side. 4. A v. d. murmur in the pulmonic area, much less intense than the v. s. and somewhat toneless, scarcely heard outside the limits of the said area, and certainly rapidly becoming inaudible on passing towards the apex, contrasting markedly, therefore, with the intensity of the v. s. at the mitral area. 5. Distinct weakening of the respiratory murmur all over the right side of the chest. As regards the other physical signs, it was noted that there was a slight inequality in the size of the pupils, the right being more dilated than the left. (This sign only lasted a few days.) The pulse was regular and moderately compressible, and the right and left radials were equal, both as tested by the hand and graphically rendered by the sphygmograph. Breathing was tranquil and there was no dyspnœa. Swallowing was easy, and on inquiry we found that there never had been any hæmoptysis.

The above condition was preserved almost unchanged, save for gradually increasing weakness, until the 5th of June, when slight breathlessness was complained of; and, on examination of the chest, a small area of dulness was discovered at the left base posteriorly, and in the same area abundant small moist râles. On the evening of the 9th of June patient had an attack of sickness and vomited a little bilious matter. Dyspnœa then became marked, and was accompanied with slight pallor and lividity of the countenance, and he had to be propped up in bed. There was a short dry cough, but no expectoration. By the 11th of June the dulness had extended up to at least one third of the back on the left side, and, besides, was now detected at the extreme right base. There was also the slightest trace of œdema at the ankles, and jugular pulsation became obvious. By June 27th the dulness had involved two thirds of the back, and evidences of fluid in the pleural cavity were present over the whole of the dull area. The dulness on the right side remained unchanged. From the 15th to the 24th of June the dyspnœa, which had not lessened since its onset, became urgent, and was associated with a sense of smothering, present only in the nighttime during the first three days of this period, afterwards present both day and night. Sleep gave way to pervigilium. On June 25th the dyspnœa had lessened, and the general condition had somewhat improved, for the pain in chest had gone, but œdema had extended up to the thighs, and the calves of the legs and inner aspects of the thighs had become painful. Pulse, for the first time, clearly became of the water-hammer type. Slight icteric tinting appeared on June 27th, increased up till July 7th, and then gradually lessened till the end. On June 30th vomiting and pain in the chest returned, the former, however, lasting for only two days, the latter persisting in great severity until death. Œdema now became general. There was no great difficulty in breathing, however, and lividity was slight, but frequent blanchings with coldness of the surface were observed. Pulse lost the water-hammer character, and became fuller and less easily compressed. Aggravation of the pain, amounting to agony, continued until July 12th, when death occurred from syncope.

The temperature was normal throughout. The urine was always, but specially in the last four weeks, scanty, the average in said

period being eighteen ounces. It frequently contained urates, but never albumen.

The treatment consisted in the administration of cardiac tonics, digitalis and convallaria majalis, and of diuretics. Amyl-nitrite was tried repeatedly, but failed. Alcoholic stimulants seemed beneficial at the outset of the case, but were absolutely refused in its progress because of the great discomfort produced. Southey's tubes were tried, when œdema became urgent, but failed to arrest the downward tendency of the disease.

The autopsy was made on the following day.

The heart was slightly enlarged, and weighed fourteen ounces; all its cavities and the valvular orifices were dilated. The mitral orifice admitted four fingers, the tricuspid five. The aortic curtains were competent, and there was no thickening of them; the pulmonic were incompetent. Above the right posterior sinus of Valsalva of the aorta was an aneurismal cavity, the size of a large walnut. The sinus of Valsalva formed, as it were, a preliminary cavity at its threshold, and on a lower level. The orifice opening into the aorta was nearly circular, measuring ten lines transversely and thirteen vertically, and over its thick rim its lining membrane seemed continuous with the intima of the aorta. The floor of the sac rested on the auriculo-ventricular groove. The greater limit of the sac was formed by the posterior lateral walls of the pulmonary artery; and there could have been little to strengthen this from the coats of the aorta, for the whole wall was thinner than what that of the pulmonary artery itself should have been, and especially so at the part which bulged most into the pulmonary artery. The inner wall of the sac was puckered, and there was no appearance of stratified clot in it.

As viewed from the side of the pulmonary artery, two orifices of communication between the sac and pulmonary artery, which were difficult to see from the aortic side, now became very apparent. Each orifice was nearly circular, was a fourth of an inch in diameter, and had bevelled edges. No distinction could be drawn between them as regards age. The one opened into the left anterior (pulmonic) sinus of Valsalva; the other was just below crescentic border of the corresponding curtain. Part of the right half of this curtain had become adherent to the opposed wall of the pulmonary artery, so as to interfere with the integrity of the sinus of Valsalva, and to produce a loose fold in the floor of the sinus. When this fold was obliterated by the pressure of the finger from the aortic side of the aneurism, the orifice mentioned as opening into the sinus was thrown free—above the level of the straight border of the curtain.

Again, on examining the aortic wall, there were abundant evidences of endarteritis. These consisted in the presence of atheromatous deposit and ulceration. The wall was puckered in two places, evidently from cicatrization after atheromatous ulcers; but above the left posterior curtain, an oval ulcer, six lines in length and three in depth, had formed, and was actively advancing to perforation, which it had nearly attained.

Other important items were: 1. Very extensive, almost complete, adhesion of the right lung to the chest wall and to the diaphragm, and the presence of four ounces of fluid in such parts of its pleural cavity as had escaped obliteration. 2. Adhesion of the left lung at its base to the diaphragm and to the chest wall, and the presence of 24 ounces of fluid in its pleural cavity. 3. Some œdema of the lungs. 4. Also some emphysema of them, especially at their anterior margins.—*Glasgow Med. Journal*, Oct., 1888.

Gates (M. F.) on Bradycardia.—A boy of 14 was admitted September 10, 1888, having suffered from general malaise for a period of two weeks. One week before admission, following a bath in the river, he had a severe chill, and had grown much worse since. On his admission he had malaise, loss of appetite, and vertigo. His bowels were regular, and his temperature 103.2°. No spots were to be seen on his chest or abdomen when he was admitted; but the characteristic rose spots of typhoid fever appeared two days after his admission.

The disease ran the usual course, with an irregular but gradually falling temperature, up to September 19th, nine days after his admission, when it fell below normal.

On the 23d, the morning temperature was 97.6°. About 6 P.M. he commenced to perspire freely, and at 8 P.M. his temperature was 95.6°, and his pulse only 38 to the minute. He was in a state of stupor, from which he was with difficulty aroused.

By the use of hot whiskey, repeated every half hour, his pulse slowly rose, and reached 60 at 8 A.M. of the 24th. Whiskey was continued, and in the evening his pulse was 80.

On the 25th, it again went down to 55; but came up under the use of carbonate of ammonia and whiskey.

Since the 25th there has been a steady improvement in appetite, temperature, and general condition.

During the attacks of slowing of the heart, it was also extremely irregular, and greatly increased by very slight exertion. The attack was not preceded or followed by any discharge of blood or by excessive diarrhœa.—*Phil. Med. Times*, Oct. 15, 1888.

Bradycardia.—Dr. F. Grob, of Zurich, Switzerland (*Deutsch. Archiv f. klin. Med.*, May, 1888, p. 574), describes and discusses the characteristic symptoms of the phenomenon of "slowing of the pulse" under various conditions, after having made one hundred observations. He does this because, as far as his knowledge extends, no attempt at an exhaustive investigation of this subject has hitherto been made; which seems the more singular, since the question of "hurrying of the pulse" (*tachycardia*) has long ago been carefully and thoroughly studied. At the suggestion of Prof Eichhorst, he chooses the term *bradycardia* to designate this phenomenon, as contradistinguished from *tachycardia*.

Dr. Grob divides his one hundred observations made at the Zurich medical clinic, according to their significance, into the following three groups:

I. Physiological bradycardia—6 observations.

II. Idiopathic bradycardia—1 observation.

III. Symptomatic bradycardia—93 observations.

Group III, to which belongs the above related case, he subdivides into the follow- six classes:

1. Articular rheumatism—24 observations.

2. Diseases of the circulatory apparatus—1 observation.

3. Diseases of the alimentary tract—10 observations.

4. Diseases of the nerve centres and their peripheral nerves—6 observations.

5. Chronic infective and constitutional diseases—9 observations.

6. Convalescence after acute febrile diseases—43 observations.

The sixth class he groups, according to the several diseases, into sub-classes as follows:

Convalescence after measles, 1 case.

Convalescence after diphtheria, 2 cases.

Convalescence after erysipelas, 4 cases.

Convalescence after pleuropneumonia fibrinosa, 4 cases.

Convalescence after *typhoid* fever, 32 cases.

After having treated at length and in minutest detail of the groups, classes, and sub-classes, as above noted, the doctor proceeds to make the following remarks concerning bradycardia during convalescence after typhoid fever:

"Bradycardia occurs principally during convalescence after severe but uncomplicated cases. Occasionally, a very notable lessening of the pulse's frequency is observed, having counted in one case only 36 beats per minute, while a lessening of its frequency to 40–44 occurred repeatedly. This diminished number of pulsations may, however, according to Peacock (*Medical Times*, 1864, vol. i., p. 32), easily be turned into the opposite condition during any exertion, so that, temporarily, a rapid rise of the pulse to 100–110, and in an upright position even up to 120 beats per minute, may occur. This is verified by a few of our own observations.

"Among our patients, this slowing of the pulse usually occurred only after the fever had for several days been in complete abeyance, or even when the temperature had become subnormal to 36° C. (96¾° F.) and below, only, after an average duration of this period of 8–10 days, successively to descend again, with the progress of the convalescence, to the normal state.

"Concerning the general condition of convalescents during this stadium of bradycardia, it is to be remarked that, even with excessive sinking of the pulse-rate, there are no particular disturbances to be observed; of course, now and then complaints are heard of greater weakness, nausea, vertigo, even syncope and general pallor of the skin. Skoda,[1] in reporting a case convalescing after an attack of pneumonia, having but 16 pulse-beats per min-

[1] V. Ziemssen's "Handb. f. spec. Path. u. Ther.," Bd. v., 1879.

ute, makes no mention whatever of any general or particular disturbances.

"Finally, what is curative in this lowering of the pulse-rate during convalescence? General opinions are here advanced. Rosenthal is inclined to consider that bradycardia is conditioned by anæmia. We may suppose, further, that the nerve ganglia of the heart have been damaged by deleterious substances circulating in the blood, especially in acute infectious diseases. We may also assume the cause to lie in the consecutive weakening of the heart-muscle itself after its continuous over-exertion during the continuance of the fever-stage. Whichever of these assumptions in each case may be the correct one cannot for the present be decided. Still, it is at least probable that, according to the nature and course of the disease, there are also various causes answering thereto to be investigated; and that then, possibly, all the aforesaid points, in their place, are also to be taken into consideration."—*Phila. Med. Times*, Oct. 15, 1888.

Steven (J. L.) on a Case of Tubercular Peritonitis, with Evidence of Enlarged Mesenteric Glands, in a Boy aged 9, and Probably the Result of a Blow; Recovery after a Severe Illness of Nine or Ten Months' Duration.—A boy of 9 was admitted on 22d June, 1886, on account of pain and swelling of abdomen, with great emaciation and loss of appetite of six months' duration. The illness commenced in the month of January, 1886, with attacks of severe pain and great constipation, and about the same time the swelling of the belly was first observed. His bowels still remained costive, and throughout the illness there had been more or less irritability of the bladder.

The father is a strong, healthy man, but the mother has always been rather weakly, and looks it. Of a family of eight only two are alive, the patient aged 9, and another aged 5. Of the rest, three were stillborn; one died at the age of 3 of "disease of the bones of both feet," with running sores; the second at the age of 2 years and 3 months, of "water in the head"; and the third at 5 months, of "bronchitis."

The boy was pale and emaciated; the lungs were normal; the belly was much swollen and very tense, with limited areas of hardness and resistance at several spots —one especially noticeable being in the right lumbar region. These areas are very decidedly tender on pressure, and it was thought not unlikely that they might indicate enlarged mesenteric glands.

In addition to regulation of the diet and recommendation of rest, the following mixture was ordered:

℞ Syrupi ferri iodidi
Syrupi ferri phosph. co. āā. ʒ ii. M.
Sig. 3 ss. three times a day.

The patient was also ordered to take small doses of cod-liver oil.

5th August, 1886.—Since the last visit he has been no better; and his mother informed us to-day that immediately before his illness began in January last he had received a violent kick on the right side of the abdomen from a boy, and that this was soon followed by the onset of the symptoms. For some days past the boy has been entirely confined to bed; and, although the abdomen is still much swollen, his mother is of opinion that it is somewhat softer than before. There is great tenderness on pressure all over the belly, particularly in the right lumbar region (in front of the kidney), where there is a distinct localized hardness, which is exceedingly painful when handled, causing him at once to begin to cry. The projection and swelling of the belly do not affect the hypogastric and iliac regions, but the enlargement constitutes a protuberant mass all above this, which is slightly pyriform in shape, the apex being at the umbilicus. There is a rickety curve on the right tibia and emaciation is very extreme.

September 7.—Within the last week or two considerable improvement has taken place. During this time the boy has not been entirely confined to bed, having been able to sit up more or less, and his mother states that not only is the abdomen much softer but the pain is almost entirely gone. The tender hard area described in last note is now almost painless, but the protuberance in the region of the umbilicus is still marked. One inch above the level of the umbilicus the circumference of the abdomen is 22¼ inches; at the level of the superior spinous processes of the ilia it is 19¾ inches. The whole belly is now soft and kneadable, and little if any tenderness is caused by manipulation. Treatment continued.

19th November, 1887.—The mother informed us that during the past twelve months the child has kept quite well, and is able to run about and play all day with his com-

panions. His mother brought up the boy with her some time afterwards, and he was found to be in good health.

12th September, 1888.—The patient was seen again to-day, and it was found that he had kept quite well and been able to attend school during the whole of the past year. The boy looks plump and well nourished, and has a tolerably good color. His mother states, however, that he is not a great eater, and is rather liable to be troubled at times with a short dry cough. The bowels cause him no trouble, and he never complains of any pain in the belly. The circumference of the abdomen is 20½ inches at the umbilicus and 21½ inches two inches above this point. The percussion is tympanitic all over, and no hardness or resistance is felt in any part. The protuberance described as persisting in the note of 7th September, 1886, has entirely disappeared, as has also the hardness in the right lumbar region. The abdomen in fact is quite natural both in size and shape. A careful physical examination of the chest fails to detect any abnormality either in the lungs or heart.—*Glasgow Med. Jour.*, Oct., 1888.

Lamb (D. S.). Gall-Stones in a Girl Fifteen Years Old.—On the 26th of September, 1888, I made a post-mortem examination of a mulatto girl, fifteen years old, who had died of typhoid fever.

I found in the gall-bladder forty-two gall stones, about the size of small peas, the surface a pale yellow, of a greasy feel, and with irregular, club-shaped prominences; the body of the stone brownish. The gall-bladder was normal. No history of biliary colic.

Gall-stones at so early an age are so rare that this case seems to me worthy of record. —*Med. News*, Oct. 6, 1888.

Staveley (W. H. C.) on Gonorrhœal Rheumatism Occurring at the Age of Nine Years.—The occurrence of acute inflammation in the metatarso-cuneiform joint of a girl so young as this patient was difficult of explanation in the absence of a history of injury; and it was the presence of such an unusual tenderness and pain in the fascia mentioned in the report that induced the house-surgeon to inquire as to the possibility of the presence of gonorrhœa, no mention of the vaginal complication having been made by the patient.

A girl nine years old, was recently brought to the out-patient department of the hospital by her mother. The patient had complained of smarting pain on micturition, and a vaginal discharge of a thick purulent character had been noticed for a week. She then began to complain of aching pains down the back of the neck. This was followed by a pain along the bicipital tendon on the opposite side. These pains became less severe, but then began in the left foot, first on the inner side of the heel, then along the sole, and finally in the first metatarso-cuneiform joint. There was no history of injury and no family history of tubercle. On examination, the joint was intensely painful, red, hot, and swollen; there was extreme tenderness, both superficial and deep, extending along the plantar fascia to the inner side of the heel. No other joint was affected. There were no signs of outrage about the vulva, with the exception of the labia being swollen and the presence of a thick purulent discharge. The mother indignantly denied the possibility of the child having been tampered with. The case was treated as one of gonorrhœal rheumatism, and the foot put up in plaster-of-Paris splints. With rest all pain in the foot disappeared, and the swelling gradually subsided without any complications. During the course of attendance at the hospital the mother acknowledged that the child had been indecently assaulted on three occasions by a youth, who, it appears, had been recently treated for gonorrhœa.—*Lancet*, Oct. 6, 1888.

SURGERY.

Caldwell (R.) on Peculiar Result of a Specific Sore.—A private, was admitted into hospital, suffering from a crop of ordinary soft sores on the prepuce, and there was one in addition on the dorsum of the penis. He was treated with black wash and the chancres speedily commenced to heal, except the one on the dorsum of the penis, which took on a sluggish and unhealthy action.

As the man was very cachectic he was treated with tonics and a liberal diet, under which régime the ulcer commenced to heal, and he was allowed out of bed, as it was confidently expected that he would be fit for duty within a few days. There was only a small ulcer left, not much larger than a pin's head, from which there oozed a little watery fluid. It was touched with nitrate of silver, but still refused to heal.

The man complained of no pain whatever, and was certainly in very much better health than when he was admitted to hospital, but in spite of various applications the remains of the sore refused to heal, although those on the prepuce had long since disappeared. On squeezing the dorsum of the penis from above down I discovered that the discharge was much increased. I immediately attempted to use a probe, and, to my surprise, found that it passed freely in various directions under the skin, the man suffering no pain or inconvenience from the passage of the instrument.

The whole of the subcutaneous tissue of the penis appeared to be undermined, although the organ presented no superficial evidence whatever of such being the case. It was immediately decided that the only course would be to slit up the sinuses at once. The patient was accordingly placed under chloroform, and, a director having been previously passed into the sinus as far as it would go in a dorsal direction, a free incision was made with a bistoury. Several other incisions had to be made, both in the direction of the prepuce and also transversely, before the whole extent of the mischief could be exposed.

The unhealthy action had been limited by fibrous covering of the corpus cavernosum, which was distinctly visible during the operation. One vessel, not the dorsal artery, gave a little trouble, but it was secured by torsion. On the whole there was very little bleeding. The tissues were tough and brawny in consistence.

The wound was dressed with iodoform, and healed kindly by granulation, the man being ultimately discharged with a somewhat scarred but otherwise uninjured organ.—*Medical Press*, Oct. 3. 1888.

Hamilton (G. G.) on Three Cases of Intestinal Obstruction Due to Meckel's Diverticulum.—The first case was a boy of 6, with ordinary symptoms of acute intestinal obstruction. At the operation it was found that a diverticulum sprung from the ileum about two feet from the cæcum. A loop of about two feet of small intestine, constricted by the diverticulum, occupied the pelvis and had to be emptied of gas before it could be withdrawn. The patient made a good recovery.

In the second case, a boy of the same age, a pear-shaped diverticulum sprang from the ileum three feet from the ileo-cæcal valve. Two and a half feet of the ileum had become twice twisted around the neck of the diverticulum, which was constricted as well as the bowel. This case terminated fatally.

The third patient was a sailor of 33. The diverticulum arose from the ileum about 18 in. from the ileo-cæcal valve, and extended up to the umbilicus, where it was attached. The constriction was at the point of origin of the diverticulum, and was relieved by the operation, but the patient died.—*Lancet*, Oct. 6, 1888.

Schenck (W. L.) on a Case Illustrating the Efficiency of Dr. Senn's Hydrogen-Gas Test for Perforation of the Alimentary Canal.—A strong man of 49 was shot in the abdomen with a 42 calibre pistol. Twenty-six hours later the patient was anæsthetized and hydrogen gas injected per rectum. "At the ileo-cæcal valve there was a slight gurgling sound followed by a tremulous movement which was very soon transferred to the track of the ball through the abdominal wall, and in a moment the diagnostic flame told the tale of a perforated bowel."

Five perforations of the ileum were found and closed.

Slight reaction occurred but death took place three hours after the completion of the operation.

Whilst this case proved fatal from the extent of injury to the bowels, it admirably illustrated the efficiency of Dr. Senn's method of diagnosis. The apparent direction of the ball left room for questioning whether it had dipped deeply enough into the abdominal cavity to reach the bowels, and the general condition of the patient did not solve the doubt, while the insufflated gas quickly told the tale.—*Jour. Am. Med. Ass'n*, Oct. 13, 1888.

Possible Dangers in Rectal Insufflation with Hydrogen Gas.—Editorially the *Jour. of the Am. Med. Ass'n*, October 13, 1888, says:

"In reply to our inquiry, a distinguished teacher of chemistry writes:

"'I can readily imagine that a careless and inexperienced operator might meet with unhappy results in at least two ways:

"'I. Unless the hydrogen were generated from perfectly pure material, it might contain impurities of greater or less toxic power. The most dangerous of these would be hydrogen arsenide (arseniuretted hydrogen), which is one of the most pow-

erful poisons with which we are acquainted when inhaled into the lungs, and *presumably* quite dangerous, also, when injected into the bowels. Since both sulphuric acid and zinc, as ordinarily found in commerce, are usually considered contaminated with arsenic, the hydrogen given off from such material would be quite rich in the poisonous hydrogen arsenide.

"'II. There is certainly danger of getting a mixture of atmospheric air with the hydrogen, either by faulty generation or by unskilful manipulation during insufflation. In that case, an explosion would be likely to occur, upon applying a light, which might do considerable damage. Care, however, could remove this danger wholly, for a skilful operator would assure himself of the purity of his hydrogen before using it, nor would be permit it to become contaminated during use. As there is but a very small amount of oxygen in the intestinal gases, I think there would be no danger of an explosive mixture being formed after insufflation of a pure gas.'"

Hubbard (L. W.) on the Treatment of Acute Abscesses.—The skin over the abscess, and for some distance around, is first thoroughly cleansed. To accomplish this, the hair, if abundant, should be removed and the surface washed with soap and water, and subsequently with a solution of bichloride of mercury (1 to 2,000). This may be followed by an alcohol bath, which, of course, is not necessary unless cultures are to be made, but still does no harm, and is an additional precaution. The incision should be made with a sterilized knife, and ought to be only large enough to give moderately free exit to the pus, and permit the easy entrance of the small nozzle of a syringe.

The pus should be slowly evacuated by moderately firm pressure over the surface until it ceases to flow. Then the cavity should be thoroughly irrigated with the bichloride solution (1 to 2,000 or 4,000) until it runs out perfectly clear. If, after the first washing, pressure brings a drop of pus or cheesy particle to the wound, it is my practice to wash out the cavity again. If the abscess is small, and there has not been much hemorrhage, a tube or seton is not necessary, and the antiseptic dressing may be at once applied.

It is better to remove the first dressing at the end of twenty-four hours, and if any thing like pus is present in the dressing, another washing should be employed, and the dressing reapplied. As a rule, under this plan, even the skin wound will be healed at the end of twenty-four hours.

I should advise the introduction of a tube or seton for twenty-four hours where the abscess is of large size or the hemorrhage is rather free.

The disadvantages of this plan of treatment for small acute abscesses are:

1. The amount of time and attention to details necessary to secure success, as compared with the gravity of the affection.

2. The pain which the washing out occasions being generally more severe than that caused by the incision. Adults are usually willing to endure this for the sake of more speedy cure, and with children local or general anæsthesia can be employed.

The advantages are:

1. If thoroughly carried out, an almost certain cure in from forty-eight to seventy-two hours.

2. The certainty that no septic poisoning can arise from decomposing pus.

3. The small scar, which usually disappears after a time. This is no small consideration when the abscess occurs in an exposed part, especially if the patient be a woman or child.—*N. Y. Med. Jour.*, Oct. 13, 1888.

MISCELLANY.

Breneman (P. P.) on an Unusually Rare Case of Plural Births.—On June 20, 1888, I was called it to attend a woman who had the previous day given birth to quadruplets. She was suffering with severe after-pains and very painful hemorrhoids.

The patient I have frequently had under my care suffering generally from cardiac asthma, consequent on an attack of rheumatic fever; she never enjoys good health. Her family history shows no tendency to plural births. She is thirty-one years of age, first menstruated between seventeen and eighteen, since which time she has given birth to seven full-time children, the youngest of which is two years and eight months old. Her previous labors have been rather unnatural; says she has had three cross-births and had to have the children turned.

Her last menstruation was from Decem-

ber 20th to New Year's Day; quickened the middle of April; says she did not have a day's good health while carrying, no appetite, and was an immense size, in fact a burden to herself near the last, feet and legs very œdematous, and noticed very little movement with the exception of an occasional flutter.

She was first taken ill on the previous Friday and had an occasional pain until Tuesday about 11 o'clock, when the membranes containing the first child ruptured and there was an immense gush of liquor amnil; her husband just happened to come into the house, and noticing the condition of affairs assisted her into bed, when she immediately had another pain, and the first child was expelled. He ran for the midwife who was there five minutes afterwards. She had scarcely time to tie the chord and remove the child when another pain ruptured the membranes containing the second child, and there was a second gush of liquor amnii; another pain expelled the second child, which was followed by the placenta, with the two cords attached. But a few minutes elapsed when another pain ruptured the membranes containing the third child, when there was another gush of liquor amnii, which was followed by the third child with its placenta.

The midwife, thinking she had come to the end, made preparation for applying the binder, when the membranes containing the fourth child ruptured, when there was another gush of liquor amnii, and with a few pains the fourth child was expelled with its placenta. There was very little hemorrhage. The labor was quite natural. The children were expelled head first, with the exception of the fourth, which was expelled feet first. The labor was very short, there being but thirty minutes from the time the first child was born to the completion of labor; ten minutes between each child. The children were all born alive, and lived from two to six hours and a half.

I examined the children and found them to be as large as the usual 5½ months' child, perfectly formed and exceedingly well nourished; three girls and a boy. The mother made an uninterrupted recovery, and was out of bed on the eleventh day.—*Australasian Med. Gaz.*, Aug. 1888.

Mackenzie (W. G.) on Ovariotomy in a Child Eight Years and Six Months of Age.—About six months ago the child was ailing with a severe cold, and at that time the mother noticed that the child's abdomen was large; but little notice was taken of this fact, as the child did not complain of any pain. In September, the swelling having increased considerably, she was brought to the hospital. Around the abdomen, midway between ensiform cartilage and umbilicus, 24½ inches; at umbilicus, 23½ inches. On the 10th of October, when the child came under my care, the girth of the abdomen had increased more than one inch.

After very careful examination, a unilocular cyst — probably a dermoid—was diagnosed.

On the evening of the 12th of October the bowels were well emptied by a dose of castor-oil, and on the morning of the 13th by an enema of hot water. At 8 o'clock A.M. a cup of beef-tea was given; and at 12 o'clock I opened the abdomen by an incision in the median line, midway between the umbilicus and pubes, 2½ inches long. Having exposed the cyst wall and evacuated about two and a half quarts of fluid, I cautiously broke down some slight adhesions to the abdominal wall, and drew out the tumor. I tied the pedicle, which was 2 inches long, by the Staffordshire knot. No cyst fluid was allowed to enter the abdominal cavity. I closed the wound by three deep silver wire sutures and three superficial silk sutures, and dressed with powdered iodoform, iodoform gauze, and absorbent cotton.

The child having first been admitted to the medical ward would not be constrained or coaxed to remain in the surgical ward, but cried incesssantly for three hours in the early morning, and when once removed to the medical ward she made an uninterrupted recovery. I did not open the wound for six days, when I found it had healed by first intention.—*Dublin Jour. Med. Sci.*, Oct., 1888.

The Hoagland Laboratory.—This Laboratory is now ready for practical work. Special facilities are offered to those who desire to prosecute original research. For this purpose private laboratories have been provided, and arrangements are now being made for the purchase of a library which shall contain all the literature necessary for reference in the departments of Bacteriology, Physiology, and Pathology. George T. Kemp, Ph.D., will serve as Associate to Dr. Sternberg. J. H. Raymond, M.D., Secretary, Henry St., cor. Pacific St., Brooklyn.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of

CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital; CONDICT W. CUTLER, M.D., Instructor in Diseases of the Skin, Post-Graduate Medical School, New York; JOHN S. HAWLEY, M.D., Attending Gynæcologist, New York Hospital, Out-Patient Department; FREDERICK PETERSON, M.D., Lecturer on Nervous Diseases at the New York Polyclinic.

VOL. V., NO. 44. NOVEMBER 1, 1888. WHOLE NO. 92.

CONTENTS.

	PAGE
Leading Article	521
Occasional Report on Diseases of the Skin	526
Therapeutics	530

LEADING ARTICLE.

Some Recently Reported Cases of Reflex Neuroses.—The neuroses caused by reflex irritation cover the whole field embraced by that group of diseases, but by far the most common are such perversions of general sensibility as neuralgia and headache, such impairment of special sensibility as amblyopia and amaurosis, and such modifications of motility as spasm, localized in chorea, or generalized in epileptiform seizures, or paresis which is generally of very limited distribution. As a general thing, sensory disturbances are much more easily connected with reflex irritation than motor disturbances, it being the opinion of the writer that *genuine* reflex neuroses are much rarer than is generally supposed.

Dr. Albert P. Brubaker, of Philadelphia, reports[1] a case of epilepsy caused by dental irritation.

A girl of nine had three teeth extracted for toothache. The same afternoon epileptiform convulsions set in, and continued for four months, amounting to forty in all. A carious molar in an inflamed lower jaw was removed with restoration of general health and a cessation of attacks up to the time of reporting the case, eleven months. The author publishes fifteen other cases from various sources. In nine cases removal of carious teeth cured the disease; in two cases removal of carious teeth and lancing the gums over coming teeth; in one case removal of carious teeth and a piece of necrosed bone was sufficient; in one case simply lancing the gums sufficed; in one case the relief of an overcrowded state of the teeth, and in one case simply a change of artificial teeth brought about a cure. In all these cases the existence of genuine epilepsy is vouched for, the attacks in some cases being severe and frequent, and in one case there being a dementia, which disappeared after operation.

Scatliff reports[2] a case of night terror and screaming in a child cured by removal of the tonsils.

The patient was a boy about seven years of age, to all appearance in good health. He seemed to be quite well all day, but every night, after he had been asleep some little time, he used to wake up in a state of great terror and alarm, cry out, and refuse to be comforted (his cries frequently alarmed the neighbors). In a short time he got over the attacks, and became composed and rational, and would lie down quietly to sleep again. Examination showed that he had very large hypertrophied tonsils, which were at once removed, very little hemorrhage following. Complete relief followed. The author presumed that in deep sleep, when the patient lay in some unfavorable position, the tonsils obstructed the respiration so as to cause imperfect aëration of the blood and the disturbed mental condition.

In the *Dublin Journal of Medical Science*, May, 1888, Foot reports a case of gastric epilepsy.

A boy had at the age of three what was called cerebro-spinal meningitis, followed by very violent general chorea, lasting three weeks. For some time after this, one foot remained in a position of talipes varus. When seventeen he had scarlatina. In his eighteenth year he had his first epileptic attack after partaking very freely of over-

[1] *Phila. Med. Times*, Feb. 1, 1888.

[2] *Lancet*, Oct. 6, 1886.

ripe plums. This attack was very severe, being accompanied by a petechial eruption and subconjunctival hemorrhages.

The first nine attacks occurred at or immediately after meals, and appeared to be connected either with the use of unsuitable articles of diet, or with an injudicious method of eating ordinary food. The earlier attacks ensued after eating such things as half-ripe plums, salad, cream, chancellor's pudding, rich mutton. The greater number of the subsequent fits were either during or soon after dinner. The dining-room was the place in which he was generally taken ill. On some occasions vomiting indicated a desire on the part of the stomach to rid itself of something noxious; yet it was found that emetics often failed to unload the stomach.

He was first put upon belladonna in increasing doses up to the point of toleration. Next he was given bromide of potash, with small amounts of strychnine; next, on Brown-Séquard's recommendation, he had applications of ice to the cervical and intrascapular spine and an iodide-bromide mixture. No improvement ensuing, he was ordered five or ten drops of chloroform in wine just before dinner; later, a seton was put in the back of his neck, and bromide of calcium, with arsenic, was given with still no good result.

Nitrite of amyl was given him to inhale, but, in spite of the fact that the aura preceded his attack by some time, it did not suffice to abate his attacks.

In the year, 1880, which may be called the final year of the disease, he took nitrate of silver for some time, and also pills of phosphorus and valerianate of zinc, but it was evident the disease had been upon the wane before these remedies had been employed.

As an example of epileptiform seizures from irritation of the alimentary canal lower down, the following case[1] of convulsions from oxyurides vermiculares is interesting.

"In December, 1885, I was first consulted by a man, aged 57, but of a much older as well as somewhat cachectic appearance. He complained that for fully a year he had been troubled by attacks, growing in frequency and severity, characterized by momentary disorders of vision (chiefly amblyopia); these were sometimes accompanied by an unpleasant odor issuing from the throat, and always followed by unconsciousness. The unconscions state was at first very brief, the man supporting himself by clutching his bench firmly. Latterly, however, he had on several occasions fallen down and the body had presented convulsive manifestations, as witnessed by his family and others. He was never a week free from several attacks, Sunday being his worst day.

"The patient admitted that he had long been troubled with threadworms, which caused him annoyance only by the itching they produced.

"Assuming a possible cause in these vermin, I resolved to try the effect of treatment directed against them upon his other affection. The result was that, for six weeks afterwards, there was no convulsive attack, though a few of the *petit-mal* seizures. The patient then became careless of treatment, with the effect of again inducing the graver phenomena. The same alternation between improvement and self-neglect has been the man's history since, with, on the whole, considerable gain during the past three months.

I may mention that at one stage I prescribed the bromides, but the man's broken-down condition quickly increased, and one of the worst epileptoid seizures occurred during their administration, and they were soon withdrawn. By careful observance of dietetic, vermifuge, cathartic, and tonic treatment, the patient reduces his ailment to rare attacks of the minor form, but has never been able to get completely rid of them. Whether by more prolonged adherence to treatment he might effect cure, or whether that is too much to hope for, taking into account the difficulty of finally exterminating the parasites in persons well on in life, and also the morbid excitability of the cerebrum acquired by long subjection to special irritation, I cannot say."

Hogg reports[2] a case of amaurosis and strabismus from ascaris lumbricoides in a girl of three. The child also had oxyurides and a tapeworm.

"When the mother consulted me about her child's sight, the ordinary symptoms of worms were mostly absent. Her sleep was not disturbed; she had no nasal irritation; no craving for food of any kind; disliked

[1] James Ferguson in *Brit. Med. Jour.*, May 19, 1888.

[2] *Brit. Med. Jour.*, July 21, 1888.

meat, and had a small and capricious appetite; her daily food consisted for the most part of milk and bread and light sweet puddings. She was spare in body, weak in her legs, and her movements were consequently slow, passing from one chair to another by touch. This the mother attributed to the loss of sight, which had now persisted for more than a year. Her speech was very defective; her vocabulary consisting of a few unintelligible sounds, just sufficient to make her wants known to her nurse, and no more. When placed in front of a strong light, the eyeballs rapidly moved upwards, the irides being concealed by the upper lid. From this cause, and that of persistent squint, I was quite unable to make any ophthalmoscopic examination. I, nevertheless, came to the conclusion, not shared in by any one who had previously seen the child, that the strabismus at all events was symptomatic of worms. I accordingly prescribed anthelmintics, commencing with scammony and jalap, which, after the administration of a second powder, gave the first intimation of the correctness of my diagnosis, as it brought away a large number of ascarides. My next remedy, filix mas, dislodged a portion only of a tapeworm, eighteen inches long; other portions came away some days afterwards; and I next prescribed three-grain doses of santonine at bedtime, to be followed by a full dose of castor-oil the following morning. This treatment proved very effectual; the first powder brought away five or six large lumbrici. In the course of the following fortnight, five- or six-and-twenty round worms, measuring from four to eight inches in length, were expelled; the relief obtained by the little patient was most gratifying to behold. Two months have elapsed. She is recovering her sight, and the strabismus has entirely disappeared. Her bodily health is quite changed for the better; she is strong on her feet, can walk a considerable distance, and has gained in intelligence and in speech."

According to the *Jour. of the Am. Med. Ass'n*, Aug. 11, 1888, McKendrick reported the case of a woman who had suffered for seven months from a partial paralysis of the lower limbs; she passed a tapeworm nearly twenty-two feet long, and within four days had completely regained the use of her limbs. The same authority quotes Fuller as reporting the case of a boy who had paralysis first of the right and then of the left leg, and recovered after a dose of santonine, which brought away a large number of dead lumbricoid worms. Moll's case according to the same journal was that of a woman who suffered for three months from paralysis of the upper extremities, and recovered after the expulsion of a tapeworm, while Eggleston's case was that of a case of reflex paraplegia and aphasia from tapeworm, the child recovering after the expulsion of the worm.

Neuroses from genital irritation are frequently reported, and attention has been called before in these pages[1] to circumcision as a remedy in such cases.

Dr. J. G. Carpenter, of Stamford, Ky., reports[2] some functional disturbances in children relieved by circumcision. The cases were four in number, and all had phymosis. The symptoms relieved by circumcision were nocturnal enuresis and disturbed sleep; in two cases urination which was extremely painful and accompanied by spasms in the legs; in two cases painful erections were present; and one case, besides disturbed sleep, showed an inaptitude for learning, which passed away after operation.

In the *Atlanta Med. and Surg. Jour.*, Oct., 1888, Dr. J. F. Cole, of Carrolton, Ga., reports the case of a boy of three who was seized with fever and convulsions. He was treated for worms and lost the use of his legs, became subject to vagrant, sharp pains, and began to lose his mind. On examination he was found to have a very tender spine, and it was noticed that his urine escaped only by drops. Circumcision cured the child.

Cases like the following, reported by Reverden in the *Rev. Méd. de la Suisse Rom.*,[3] are quite often recorded.

A child, æt. 9, suffered for several weeks from signs of hip-joint disease. The case was diagnosed as one of this description, and the patient was confined to bed for five months and extension applied. At the end of this period his condition was in no way improved. At this time, however, it was noticed that the prepuce was elongated and tight, for which circumcision was performed, and all the symptoms vanished at the end of three days. A year subsequently to the operation the patient was quite well, and had not suffered from any recurrence.

[1] MEDICAL ANALECTIC, 1887, pp. 164, 290.
[2] *Am. Prac. and News*, May 26, 1888.
[3] *Med. Press*, June 27, 1888.

Minor nervous ailments from uterine disease are reputed to be very common, serious neuroses less so.

In the *Med. and Surg. Reporter*, Aug., 1888, Dr. William A. Carey, of Philadelphia, reports a case of epilepsy due to stenosis of the internal os uteri.

The patient was a married woman of 24, who suffered from dysmenorrhœa, frequent micturition, epilepsy, headache, failure of memory, irritability, and melancholy.

On examination there was found to be anteflexion and stenosis of the internal os uteri. All these symptoms disappeared after rapid dilatation of the internal os uteri.

Sensory disturbances about the head from ocular defects are quite common, but the dependence of more grave neuroses, such as epilepsy, upon similar causes, is doubted by many.

In the *Journal of the American Medical Association*, Feb. 18, 1888, Dr. J. E. Colburn, of Chicago, narrates a case of epilepsy cured (apparently) by the correction of an error of refraction. The patient was a student of 24, who consulted the author for mental confusion, and inability to read or study without flushing of face and pulsating of superficial arteries, with sensation of pounding in back of head and neck, and vertigo, which would disappear when eyes were closed. At school the patient was constantly manifesting strange phenomena, at times dull and morose, and again almost brilliant and exemplary. He was unusually bright as a critic of orations and sermons, while he could hardly grasp the matter of a printed page. He left school, entered the ministry, and had his first epileptic seizure in the pulpit during a sermon. The attacks increased in frequency, and it was found necessary to confine him in an asylum. Escaping from the asylum he again came under notice, and his eyes were examined with the result of disclosing a manifest hypermetropia of .50 D, and a latent hypermetropia of 2. D, with an insufficiency of the external recti of 8°. He was ordered + 2. D, for constant use. He had but one attack afterwards.

It was found that the patient's mother was hypermetropic, astigmatic, and presbyopic, and suffered from neurasthenia, vertigo, and unsteadiness of gait.

In the *Rev. Mensuelle de Laryngologie, a' Otologie, et de Rhinologie*, August 1, 1888, Dr. F. Suarez de Mendoza reports a case of epilepsy cured by the removal of a polypus from the external auditory canal.

A man of 28 had suffered from epileptic attacks for nine years in spite of treatment by bromides, cocculus Indicus, and hydrotherapy.

At the age of 11 he had an illness which was denominated meningitis. Since this time he has had a continuous discharge from the left ear. For six years he had been conscious of the existence of a tumor in the same ear, but had been advised to let it alone.

On examination he was found to have an enormous polypus, which hung from the left auditory canal as low as the base of the tragus. An attempt being made to examine the polypus more carefully, the patient fell to the floor in a terrible epileptic convulsion. On inquiry it was found that these attacks had commenced two years after the supposed meningitis, and had varied in frequency from two or three a week in the summer to one in ten days in the winter. Removal of the polypus, which was found to spring from the tympanic cavity causing destruction of the drum, caused a cessation of the convulsions up to the time of reporting the case—a period of six months.

There are those who, with the writer, think that the term reflex, as applied to neuroses, is often misused, and that heroic treatment and operations intended to eliminate this reflex factor are often abused, and utterly fail to afford the expected relief.

Dr. Willis E. Ford of Utica, in the *Medical Press of Western N. Y.*, March, 1888, says:

"Perhaps no class of medical writers have used the term [*i. e.* reflex neuroses] so indiscriminately and so generally as those who have discussed uterine and ovarian disorders.

"It is possible that too much stress has been laid upon the necessity of removing peripheral irritations, and not enough stress placed upon the general treatment of the patient with a view to the improvement in the inhibitory power of the central ganglia.

"There have been many cases of laparotomy reported for the cure of epilepsy, periodic mania, hystero-epilepsy, etc., which have not shown very flattering results. The failures, I think, have as frequently been due to neglect of the general treatment afterward, upon the assumption

that the ovarian irritation was the sole cause of the condition, as to the fact that in many instances what begins as a reflex phenomenon sometimes produces changes in the central nervous system with permanent symptoms.

"Some cases of my own developed facts in this connection that were exceedingly interesting. A woman, aged forty, unmarried, who developed epilepsy soon after puberty, showing the disturbance at first just before menstruation only, and latterly at irregular and short intervals, became markedly worse during the two years preceding 1887. Her convulsions, even when under the influence of bromide salts in as large doses as could be given, occurred almost daily and often five or six times daily. The convulsive movements were very violent. Her mental condition was good. The very best talent both here and abroad had failed to relieve her. She was known to have a slightly retroverted uterus, and I found in addition that the left ovary was prolapsed, slightly enlarged, and irregular in its contour, and extremely sensitive to pressure. Very slight squeezing of this ovary produced not only pain but vertigo and slight attacks of petit mal. In May, 1887, I removed both ovaries and tubes, finding no adhesions or indications of former inflammation in the adjacent tissues. The left ovary contained one cyst in its capsular portion about the size of a cherry, and there were four or five smaller ones surrounding it. The entire ovary was three times its natural dimensions, due to chronic interstitial oöphoritis. The right ovary was about one half the normal size. The capsule was not involved. The degeneration was confined to the organ proper and resembled the granular degenerations seen frequently in kidney and spleen tissue. It was not a tubercular cheesy nodule, yet was of a grayish color. This is a rare form of oöphoritis and is not found described in the ordinary works on pathology, and is due to some interference in nutrition. The patient recovered from the operation without untoward symptoms, but on the tenth day had a tremendous convulsion. I then began the administration of the bromides and afterward gave cod-liver oil with arsenic, and employed massage for several months. She was very susceptible to the bromide salts, and only about twenty grains daily of the mixed salts could be given without bringing out very ugly sores. This dose was sufficient to prevent an attack. After eight months of constitutional treatment she regained her flesh and strength, and was so far free from epilepsy that she could go to her meals with the family and could walk on the streets, and she enjoyed more liberty and better health than she had known for twenty years. She had twelve slight seizures in six months. I do not think that the simple operation would have produced very marked change in the nature of this disorder. The restoration of the general health and the consequent improvement of the nutrition of the ganglionic nervous system brought about such reparative processes that the inhibitory power of those ganglia returned.

"At about the same time my colleague at St. Luke's Hospital, Dr. Booth, removed the ovaries of a young woman for the relief of violent hystero-epilepsy. She had paroxysms three or four times a week which began like an hysterical convulsion and ended in hours of such violence as to make it impossible to care for her at home. There was a large hysterical element in the case, and she had been placed in the insane asylum once, but discharged not insane. Both ovaries were found the seat of chronic interstitial oöphoritis following gonorrheal infection. The capsules, stroma, and the follicles in turn had been involved in the inflammation, and there was considerable increase of the connective tissue, which had contracted in places, giving the organ an irregular outline. The tubes were thickened and dilated, and the seat of chronic salpingitis. The cure in this case was ultimately perfect, though delayed until the general health of the patient had been restored and the discipline of the hospital had helped her to control her emotions.

"About two years ago a man was sent to me with the request that he be castrated to cure his epilepsy. This I refused to do. I sent him to the hospital, where it was learned that he was a farm laborer about forty years of age, and that he had epilepsy for about fifteen years; that he was an habitual masturbator, and that the fits came on immediateiy after a seminal emission and at no other time. There was no history of injury or severe illness. He had the grand attack about twice a week, sometimes oftener, and the *petit* attack occasionally. He was found to have an

irritable prostate, and was treated for a long time with sounds as well as by bromides and tonics to no effect. Finally he procured a legal assignment of his testicles, and after two consultations with a full hospital staff, it was agreed to remove them. This caused no special change in the character of the convulsive seizures, though while the wound was healing he was free from them. No change in his physical or mental traits was observed. His testicles showed that they had atrophied *en masse*, and there was no other pathological change. They were shrunken to about one third the normal dimensions. After a prolonged course of tonics and good food his malady slowly improved, and after a year and a half he was able to resume work, though unless he takes small doses of bromide he still has an occasional convulsion.

"This operation did not in itself produce very marked effect upon the course of the disease, and I doubt if the man would have received any permanent good from it if it had not been followed up for a long time with judicious tonic treatment.

"A boy of about ten was brought to me last year with a history of epilepsy dating back about eighteen months. The attacks had become more frequent, and were usually nocturnal, and were followed by several hours of delirium. He had a very close phymosis with considerable ulceration of prepuce and great sensitiveness. He was thin in flesh, and nervous and peevish. I could get no history of masturbation. Circumcision stopped the attacks for a few days, and though after the wound had healed there was no longer any sensitiveness or pain, the convulsions returned with about the same severity. Small doses of the bromide were given for a short time, and then cod-liver oil and tonics were substituted after a few months, and the boy is now reported as recovered.

"I have notes of five cases of urethral caruncle in which the spasm of the bladder was so frequent and excessive as to undermine the general health of the patients. In two of these, the destruction of the growth by galvano-cautery was not immediately successful, though the urethra was thoroughly dilated at the time. In a third pure carbolic acid was used, and was followed by relief sooner, because the patient was stronger than any of the others, being able to get about the house at the time. In all these cases the pain was relieved, but tenesmus of the bladder was relieved only after the general health of the individual returned, some months in each instance.

"In the two other cases no operation for the destruction of the growth could be had, and the slow dilatation of the urethra with general tonics and massage was employed. Here the pain was not relieved, but the spasmodic contraction of the bladder subsided very markedly, though it did not entirely disappear.

"I do not think that the removal of the peripheral irritation in any of these cases would have accomplished very marked good, unless the general nervous tone of the individual had been improved by subsequent treatment. The delay in the recovery of all these conditions points to the fact that the sensori-motor centres require time to repair and to again establish healthy activity.

"The condition, therefore, which makes reflex disorders possible is not merely disturbed function, but an altered condition of the ganglia themselves; the result of defective nutrition."

OCCASIONAL REPORT ON DISEASES OF THE SKIN.

BY CONDICT W. CUTLER, M.D.

Pryce (T. D.) Cutaneous Affections in Diabetes.—In several cases of diabetes the author has noticed peculiar erythematous and œdematous conditions of the skin. In one case this condition made its appearance first over the whole of the external portion of the sole of the left foot. Afterward a painful erythematous spot appeared on the plantar aspect of the left great toe. After a time these lesions increased in size, became very painful, and surrounded by an anæsthetic zone. Under the use of antipyrin the sugar disappeared from the urine, and as it did so, the skin lesions began at once to improve. When the treatment was stopped the sugar reappeared and the skin lesions also. In another case the same "erythematous œdema" made its appearance on both feet, the severity and extent of lesion seeming to change for the better or worse as the amount of sugar in the urine diminished or increased. Although there was no real tissue destruction, the author thinks that

there is some resemblance between this condition of erythematous œdema and the earlier stages of Raynaud's disease, and diabetic gangrene,[1] and would suggest that the pathological processes in these diseases may be of a somewhat similar nature. Bearing in mind these considerations, and comparing them with the chief characteristics of the cases related, it appears that the condition of erythematous œdema described is due to a peripheral nerve disturbance (probably a neuritis), the result of the circulation in the blood of the diabetic poison; and that this neuritis is more especially located in the sensory, vaso-motor, and trophic nerves, as evidenced by pain congestion, œdema, and commencing tissue destruction.—*The Lancet*, July 14, 1888.

Corbett (W. T.) Skin Diseases Due to Defective Alimentation.—In common with other organs the corium requires a plentiful supply of oxygenated blood, but an additional amount is called for to supply the appendages of the skin, the proper nourishment of which is essential for the healthy condition of the skin as a whole. There is no doubt that defective alimentation is a potent factor in cutaneous pathology. In infancy it appears most frequently in eczema, and later on in urticaria and erythema.

Eczema in infants often appears as the result of too early weaning when the child is fed with a little of every thing. That skin diseases are the frequent result of irritation of the gastro-intestinal tract is well known, and this is frequently the result of defective alimentation. The last words of England's best-known dermatologist, Sir Erasmus Wilson, in an address before the Medical Society of London,[2] were: "Well, our first six patients are adults, say between forty and sixty years of age; some have eczema, moist and dry, recent and chronic; some erythema, some gutta rosea, and some lichen. We inquire into the functions of digestion and assimilation; in the majority we find symptoms of gastric disorder, nausea, loss of appetite, flatulence, distention, constipation — all more or less confirmed. Our pen flies to the paper; we are about to prescribe; and for what?—for indigestion and malassimilation. But our patient consults us for cutaneous disease, not for his stomach or liver or digestive organs, with which he finds no fault, and which he is not aware of being in a state of disorder; while we, on the other hand, know the assimilative organs to be the cause of the irritation, and that if they be restored to their healthy function all the cutaneous symptoms will subside and disappear. Undoubtedly, when the *force majeure* has been dealt with, we shall advise our patient as to some local treatment, an ointment, a powder, or a lotion for the immediate relief of the skin; but, practically, we treat the cutaneous affection as if it were altogether secondary in importance; neither need we care to inquire too minutely whether the anatomical lesion is a hyperæmia, a papule, a vesicle, a discharge, or a state of desquamation. And if we be in want of a name to include the cases of this description, we might adopt the word assimilation, and consider this as an *assimilative group* of diseases."—*The Med. Record*, Aug. 18, 1888.

Leloir (M. H.) on Aberrant Forms of Lupus.—The author describes two rare forms of lupus to which he gives the names *variété colloide* and *variété mucoide ou myxomateuse*. The lupus tubercles of the first variety have a glassy appearance and are semi-transparent They sometimes inclose small cysts resulting from colloid degeneration. They may contain giant-cells and tubercle bacilli, but they frequently are hard to find.

In the second variety the lupus presents in the form of soft transparent masses, having a gelatinous appearance and are very vascular. They may contain very minute cysts, but degeneration and ulceration are rare. The connective tissue is softened and all elastic fibres disappear from in and about the tubercles. Giant-cells and bacilli are but exceptionally present. Both varieties are attenuated forms of tubercle of the skin.—*The Lancet*, Sept. 1, 1888.

Goto (Masanao) on Leprosy.—Climate has very little influence upon the disease, but impure air, high and low temperature and excessively dry or moist atmosphere, greatly aggravate the disease when it already exists. Fish food seems especially to favor the development of leprosy. An intoxicating drink prepared from the root of the awa tree produces an ereythematous condition of the skin which assumes a squamous form. An anæsthesia of the skin supervenes and in many cases even-

[1] Lizé, "Holmes' System of Surgery," vol. i., p. 127. Compare with first case.

[2] "On the Progress of Cutaneous Medicine during the Present Century." London, 1876.

tually runs into a true leprous condition. Leprosy is probably contagious, but inoculations have so far been without result. The disease occurs from hereditary transmission in about 50 per cent. of all cases.

Civilization has a great deterrent influence upon leprosy. A constant symptom to be found even in the early stages of leprosy is the tense, thick, cord-like condition of the ulnar, auricularis magnus, and posterior tibial nerves.—*Sei-I-Kwai Med. Journal*, May, 1888.

On Syphilis and Tuberculosis among the American Indians.—During the past five years but very little primary syphilis has occurred among the Indians. It would seem that the Indian woman was no longer susceptible to the contagion of syphilis, for all other forms of venereal disease have been of late years very prevalent among them. Previous to forty years ago syphilis among the Indians was a very rare disease, but about that time it became epidemic and hardly a family escaped its ravages. It is possible that the disease has become so incorporated into the blood of the race that each new generation is protected as by inoculation. In place of syphilis, scrofula and tuberculosis seem to flourish, and to-day they are the most frightful causes of death among them. It seems very probable that tubercular disease may originate from syphilis in preceding generations.—*Ed. Med. Press*, Aug. 22, 1888.

Riehl, G. Acute, Circumscribed Œdema Cutis.—The affection appears without cause or prodromes reaching its height in 3 or 4 hours. It consists in an œdematous swelling without inflammation, is hard and firm to the touch, and pitting slightly on pressure. It is of normal color or transparent white or red and may attain the size of the hand or larger. The temperature of the part is normal; the sensibility is somewhat reduced, and there is entire absence of pain, but sometimes burning and tickling sensations. There is usually with each attack but a single lesion, although there may be several. The average duration of a single efflorescence is about one day. The disease usually appears, in the head or extremities and may attack the pharynx or larynx. The disease is probably a vaso-motor disturbance, and is very prone to relapses—tending to recur in the same places.—*Wien. Medical Press*, 1888, Nos. 11 and 12.

Queeley (E. St. George) on a Case of Alopecia Areata.—The disease first appeared as a bald spot about the size of a cent in the front of the scalp and then attacked the beard, removing the hair from the lower jaw. The bald spots gradually extended over the scalp, so that in six months but little hair remained. From here the disease spread to the eyebrows, moustache, pubes, and in fact all over the body, so that in twelve months the man's body was perfectly denuded of hair. All forms of treatment were tried, but without avail. After several months without any treatment the hair began to grow again, fine and light at first, but afterward strong and dark, so that his hair and beard returned as thick as ever. Since then he has had a reappearance of the disease, upon which treatment as before has no effect.—*The Lancet*, Dec. 24, 1887.

Hawkes (J.) on a Case of Vitiligo.—The patient, a laboring man, after being exposed for some time to the heat of the summer sun, complained of a feeling as though something was crawling under the skin. At the same time he noticed that the skin in spots had lost its color and was whitened. The largest patch was on the forehead, extending upward on the scalp and over the face and temples, very white, resembling the scar of a burn and surrounded by a pigmented line of demarcation. On the trunk and extremities were numerous patches having the same characteristics. None of these spots were anæsthesic, nor were the hair or sweat glands affected. The cause of the attack seems to have been due to nervous influences following heat exhaustion, and the spots having made their appearance suddenly within a few days.—*The Lancet*, May 26, 1888.

Purpura Hæmorrhagica after a Mental Shock.—Dr. Ed. de Smet, of Brussels, has recently had a case of a young woman of a highly nervous temperament, who, in consequence of a severe fright, experienced an eruption of purpura hæmorrhagica, though she had never had any eruption of the kind before. Some four months subsequently, however, in consequence of a fall, a similar eruption made its appearance. The treatment was directed mainly to the nervous system, which was evidently very much affected. Dr. de Smet refers to M. Leloir, of Lille, who has published cases of various skin

diseases—eczema, psoriasis, herpes, pemphigus, and vitiligo—which have followed a mental shock.—*The Lancet*, March 17, 1888.

Jamieson (A.) on Nodose Hairs.—The patient, a boy, aged four, presented a perfectly healthy appearance except the shortness of his hair. The hair felt crisp and wiry, the longest hairs not being over one half inch in length. Most of them were nodose. Each node was pigmented, but the rest of the hair was not. To determine how long it took each node to grow, the head was painted with nitrate of silver, and on shaving the head four days later it was found that two nodes had grown since the painting. No cause is known for the abnormality, but in this case it seemed to be congenital, as a brother and sister both have the same condition of hair, but to a more limited degree.—*The Medical Press*, July 11, 1888.

Reynolds (H. J.) on a New Method of Treating Vegetable Parasitic Diseases of the Skin.—The method is by the use of electricity, and the mode of application is as follows: The surface should be cleansed of crusts, scales, and sebaceous matter. Saturate the sponge of the positive electrode with some parasiticide lotion, and place it upon the part to be treated. Place the negative electrode saturated with water on some point near by. The electrode should remain on each place several minutes, but the whole sitting should not be over fifteen minutes each day. The best parasiticide is one per cent. solution of bichloride of mercury. The current used should be the galvanic, and as strong as can be comfortably borne by the patient. Usually a current produced by 5 or 10 cells will suffice.—*So. Clinic*, Aug., 1888.

Variot (Dr.) on Destroying Tattoo Marks.—A concentrated solution of tannin is poured over the tattoo mark and worked into the skin by a series of pricks, as in tattooing proper. The mark is then rubbed over with nitrate of silver, which is allowed to remain *in situ* until the prick marks show out as black points. The caustic is then washed off, leaving the black stain of tannate of silver. The inflammation resulting leaves scabs, on the disappearance of which no trace is left of the original design, but in its place a reddish scar, which becomes less and less visible. There seems to be no danger of ulceration.—*The Medical Press*, Aug. 22, 1888.

Jackson (G. T.) on Treatment of Sycosis Parasitica.—If the beard is not shaven, first wash with an antiseptic soap and apply night and morning:

℞ Ung. pomad. . . . . 20. parts.
Resorcin. . . . . 2. "
Hydrarg. bichlor. . . 0.05 part.
M.

If the beard is shaven, a zinc paste, viz.:

℞ Ung. zin. benzoat. . . . 90 parts.
Terræ silicæ . . . . . 10 "
M.

may be substituted for the ung. pomad. in the above prescription.

If the disease is very superficial it may be sufficient to touch the part daily with sublimate or resorcin pencil, or use a spray of:

℞ Resorcin. . . . . 5. parts.
Hydrarg bichlor. . . . 0.05 part.
Aq. Cologniensis,
Spiritus . . . . āā 50. parts.
Ol. ricini . . . . . 1. part.
M.

When the disease is deeper and nodes have formed, the following plaster mass should be applied and bound down:

℞ Empl. hydrarg. . . . . 10 parts.
Ac. carbolici . . . . . 10 "
Sublimate . . . . . 1 part.
M.

Epilation should be practised if pustulation has occurred, but not otherwise.—*N. Y. Medical Journal.*

Rickets (B. M.) Treatment of Carbuncles.—Prof. Verneuil of Paris recommends the steam carbolized spray frequently used. The strength used is 2 per cent. and applied for twenty minutes three or four times a day. The force of the spray he regulates by the feelings of the patient and is directed directly against the carbuncle or protected by a thin layer of muslin. Benzine when applied early and frequently to carbuncles will often check their development, and will relieve the pain and tenderness, but it should not be used over 2 or 3 minutes at a time. Rhigoline may be used instead of benzene, as its action is more immediate and lasting in its effects, and it can be used as a spray to produce local anæsthesia if an operation is required.—*Cincin. Med. Jour.*, July 15, 1888.

Slaughter (R. M.) Ichthyol in Skin Affections.—Ichthyol by contracting the calibre of the vessels is especially valuable

on acne rosacea and acne indurata and should be used in the former disease in proportion of 2 parts in 100, and in the latter from 10 to 25. It is very valuable in eczema, especially relieving the pruritus. In both acute and chronic forms of urticaria, erythema, herpes, lichen, and pityriasis it acts well, but in all chronic forms it should be used internally as well. In burns of the first and second degree it not only relieves the pain but permits the formation of blebs; and the same may be said of frost-bites. In the treatment of furuncles, inflammatory enlargements and erysipelas, it is best used in form of a twenty to fifty per cent. ichthyol ointment. In other cases it may be employed in aqueous solutions and the part afterward covered with a little cotton.—*Virginia Medical Monthly*, July, 1888.

Unna (Dr.) on Ichthyol Taken Internally.—*Internally* ichthyol is indicated in acne rosacea, nervous forms of eczema, lichen urticatus, erythema multiformé, dermatitis herpetiformis, and furunculosis, but it should not be given in psoriasis.

The author has also found it beneficial in skin diseases, complicating rheumatism, asthma, chronic catarrh of the stomach and intestines, chlorosis, tuberculosis, and scrofula, especially in children.—*The Brit. Med. Jour.*, Apr. 9, 1887.

Veiel on a Red Veil as a Remedy for Eczema.—A lady, twenty-four years of age while travelling was suddenly seized with itching of the face, followed by the production of red, wheal-like elevation of the skin. These disappeared after four days' confinement in her room. Afterward any exposure to the sun, either in clear or cloudy weather, during the summer months reproduced them—each attack becoming more severe and the infiltration of the skin greater. Even in a closed apartment, if sitting near a window, the side of the face next to the light showed some irritation, usually manifested by a papular eczema. The affection seemed to be entirely due to the sun's rays, for going out after dark in all kinds of weather had no effect upon the skin. Artificial heat and light likewise had no effect upon the skin. All kinds of treatment were tried without result, until a red veil was used to protect the skin from the sun's rays, which has proved curative.—*Med. Register*, Aug. 24, 1888.

Jackson (G. T.) Anthrarobin.—Anthrarobin is derived from certain coloring matters, as alizarin, by chemical reduction, and its action, like chrysarobin, is due to its oxidizing properties. It is a permanent yellowish and odorless powder, insoluble in water, but soluble in chloroform, alcohol and glycerine. It is used in the form of ointment, tincture, or glycerite in the strength of from 10 to 20 per cent. It is employed externally in the same class of skin diseases in which chysarobin is indicated, and although it is not as rapid in its action, it has the advantages over the latter drug by not so badly staining the skin or clothing, never producing irritation of the skin, and in its cheapness. It is more active when applied to the skin after washing with green soap.—*N. Y. Med. Jour.*, July 8, 1888.

THERAPEUTICS.

Leidy (J.) on the Influence of Digitalis on Normal Temperatures and its Action as an Antipyretic in Typhoid Fever.—From clinical observations the author concludes that, therapeutically, digitalis depresses normal temperatures from one to one and a half degrees; that this subnormal range remains from one to two days after the administration has ceased.

In typhoid fever it may be said:

I. Digitalis reduces the pulse-rate, diminishes the respirations, and depresses the temperature.

II. That with a fall in the pulse and respirations there is a corresponding decline in the temperature.

III. That a weak heart is no contra-indication to its use.

IV. The main indication for its use is a weak heart, independent of hyperpyrexia.

V. Though a most powerful antipyretic in treatment of hyperpyrexia when associated with a weak heart, it should not, however, be used to meet this indication when there are no evidences of cardiac weakness, —*i. e.*, when the pulse is strong, full, and bounding.

Both the tincture and infusion were used, preferably the tincture in typhoid fever and infusion in chronic heart disease. We found no hesitation in using the tincture hypodermically in typhoid fever when the stomach refused to retain it. It has been used since the above cases were treated, in combination with quinine, and in addition to the cold-water treatment,

with good results.—*Therap. Gaz.*, Oct. 15, 1888.

Hatch (H.) on the Abuse of Narcotics.—After citing cases where a pernicious habit originated from a careless use of narcotics by physicians, the author says:

"When the physician finds it necessary to administer a narcotic or a drug of that character, let him compound it himself, and keep his patient in profound ignorance as to what he is giving him.

"In compounding the medicine, he must so disguise it that the patient, or even a druggist, could not tell of what it is composed without a great deal of trouble, and when necessary to continue it any great length of time, let him change its color, taste, etc., frequently, and I will assure you the physician will never have a morphine, chloral, or any other patient of this kind to answer for."—*Weekly Med. Review*, Oct. 6, 1888.

Smith (P. B.) on the Treatment of Recent Pleuritic Effusion by the Administration of Saline Cathartics.—A spare-looking man, aged 28, was admitted on January 26, 1887, suffering from acute pleurisy, with extensive effusion on the left side. For five days after admission he was treated by the administration of alkaline diuretics, along with the application of counterirritants. At the end of that time, however, as there was not the slightest improvement in his condition, I determined to try the effect of saline cathartics. Accordingly, on February 1st, I ordered him to have, twice a day, two drachms of magnesium sulphate, dissolved in as small a quantity of hot water as possible, and directed that he be almost starved of fluids. In passing, I may mention that magnesium sulphate was the saline chosen, partly from its effective cathartic properties, and partly from its great solubility, for it is dissolved in less than its own weight of hot water. In eleven days all evidences of effusiou had disappeared, and the heart was restored to its normal position. As was to be expected, the secretion of urine underwent marked diminution during the time the patient was under the cathartic treatment, and it is interesting to note that the amount became more than physiological soon after the drug was discontinued.

A robust-looking fisherman aged 28, was admitted on May 19, 1888, complaining merely of debility. On physical examination of the chest, however, there were signs of great pleuritic effusion on the left side. The patient was ordered on May 22d to have twice a day half an ounce of magnesium sulphate dissolved in the minimum quantity of water necessary for solution, and, as in the previous case, the ingestion of fluids was restricted. Free purgation rapidly ensued, and on May 24th, cardiac pulsation was faintly visible in the left fourth interspace close to the sternal edge, but it was still to be seen, though less distinctly than upon admission, to the right of the sternum.

On May 29th it was noted that the apex of the heart was beating vigorously in the left fourth interspace midway between the nipple and the sternum; all signs of effusion had disappeared, and loud pleural friction was audible at the extreme base of the lung posteriorly. Within a week from this date the last traces of friction vanished and the patient was discharged.

Patients of poor physique or in whom a phthisical tendency exists are obviously ill suited for this plan of treatment, and when dyspnœa is an urgent symptom, especially when accompanied by signs of collateral hyperæmia or œdema, the use of the trocar gives more speedy relief than that afforded by free purging. Still, one meets with many cases where the effusion is large and of recent occurrence, where dyspnœa is not pronounced, and where signs of physical and constitutional debility are absent, and these are the cases which seem to me to be peculiarly adapted for treatment by the method which is the subject of this paper.—*Br. Med. Jour.*, Oct. 13, 1888.

Baker (A. J.) on the Use of Salicylic Acid in the Treatment of Sloughing and Gangrenous Wounds.—A man received a severe contused wound of the left thumb while at work in a planing-mill. The wound was cleansed as thoroughly as possible from blood and black grease, the fragments of bone adjusted, and the wound closed and dressed. In three days the wound began to slough, and gradually progressed toward the first joint of the thumb, which I feared might be destroyed.

I filled the gaping wound full of salicylic acid, placed over this some cotton, applied the bandage, and left it for twenty-four hours. When I removed the dressing I found the surface of the wound covered with a black film, which was easily re-

moved, leaving a healthy-looking surface beneath, which began at once to heal.

Dr. Burdick, whom I believe to be the discoverer of this invaluable application of this remedy, reports seven cases of gangrenous wounds treated with salicylic acid with perfect results. His plan in treating grangrenous wounds is to trim off the dead tissue of the flaps as near the sound tissue as possible, cover the wound completely with salicylic acid, apply the dressing, and leave it twenty-four hours. He states that he has never failed to get a complete separation of the dead from the sound tissue within one fourth of an inch, and always with a healthy, healing surface beneath.—*Therap. Gaz.*, Oct. 15, 1888.

Root (P. S.) on Buckwheat as an Article of Diet in Diabetes Mellitus.—During the last three years I have had occasion to recommend flour made from buckwheat in four cases of diabetes, in none of which were there any thing but favorable results. As an article of diet it is poor in nitrogen and fat, but, like the cereals of its class, rich in starch.

My attention was first called to this cereal by Dr. A. M. Duncan, in a clinical report of its use in one case of glycosuria (*Medical Record*, vol. 27, p. 542, 1885). Cakes made from this flour can at all times be eaten with impunity; whereas the slightest return to other starchy foods, such as potatoes, wheaten bread, etc., will invariably aggravate all the concomitant symptoms. The treatment should consist of a rigid diet with this exception.—*American Lancet*, Oct., 1888.

Kipp (C. J.) on Cocaine Conjunctivitis.—The picture presented was essentially the same in all the cases. Burning and itching of the eyes and moderate dread of light were the symptoms chiefly complained of. The lids were somewhat puffy, but not red, and slightly excoriated at the corners. There was considerable secretion of the thin, viscid fluid, not unlike the mucilage from the conjunctival sac. Purulent secretion was not noticed in either of the cases. The ocular conjunctiva was slightly œdematous, and of a dirty-yellowish color. Greater changes were seen in the palpebral conjunctiva. This was swollen and of a reddish-yellow color throughout, and its surface was closely studded all over with translucent elevations (follicles), mainly of the size of sago-grains. The follicles were perhaps most numerous on the swollen retrotarsal folds. The condition of the palpebral conjunctiva was indeed very much like that caused occasionally by the long-continued use of atropine, except in this that the color of the conjunctiva was yellowish red instead of bright red. The swelling of the retrotarsal folds was the same. In all the cases the upper and the lower lids were affected alike, and both eyes presented the same appearance. I discontinued the application of the cocaine solution at once, and ordered instillation of a half per cent. solution of sulphate of zinc twice daily, and under this treatment the follicles disappeared in the course of six weeks. All signs of conjunctivitis had disappeared when I last saw the patient.—*Med. Record*, Oct. 6, 1888.

Madden (F. M.) on Cocaine Locally in Vaginismus.—As far as my experience goes, the relief afforded by cocaine is merely temporary, and (unless in those instances in which, by the occurrence of impregnation and subsequent delivery at full term, the disease is thereby cured) it will generally be found necessary to resort either to Marion Sims' operation or else to the plan of mechanical dilatation of the vaginal orifice and stretching of the pudic nerve as advocated in my paper.

I may also add that I greatly doubt that either these or any of the many other methods that have been suggested for the local treatment of vaginismus, will, as a rule, be found effectual for the permanent cure of this most distressing and obstinate complaint, unless when employed in conjunction with those constitutional remedies which are so obviously indicated by the well-marked hysterical temperament of the great majority of patients thus affected, and by the recognition and appropriate treatment of which in some instances the necessity for any topical or surgical interposition may possibly be entirely obviated.—*Br. Med. Jour.*, Oct. 6, 1888.

Death from Cocaine.—The operation was for entropion in a woman, æt. 70. M. Albadie's assistant handed him a bottle containing a 5-per-cent. solution in lieu of the 2-per cent. solution which he usually employs. Two thirds of a grain were used. Immediately after the operation the patient became unconscious, and the face became congested. Artificial respiration and subcutaneous injection of ether restored her, and she was allowed to go home, but she succumbed the same evening.—*Med. Press*, Oct. 17, '88.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of

CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital; CONDICT W. CUTLER, M.D., Instructor in Diseases of the Skin, Post-Graduate Medical School, New York; JOHN S. HAWLEY, M.D., Attending Gynæcologist, New York Hospital, Out-Patient Department; FREDERICK PETERSON, M.D., Lecturer on Nervous Diseases at the New York Polyclinic.

VOL. V., NO. 45. November 8, 1888. WHOLE NO. 93.

CONTENTS.

	PAGE
Therapeutics	533
Surgery and Pathology	536
Book Notice	544

THERAPEUTICS.

Bruce (J. M.) on the Comparative Value of Codeine and Morphine in the Treatment of Diabetes.—Experiments were conducted as follows:

The condition of the urine on admission having been carefully ascertained, the first step in the treatment was to put the patient on strictly anti-diabetic diet without medicine (more correctly with camphor water), and to keep him on this only as long as the sugar continued to fall. This diet was as follows:

Meat, 6 ozs.; gluten bread, 10 to 14 ozs.; eggs; milk, 2 to 3 pints; tea, or Van Abbott's cocoa, 2 pints; water and ice, about 3 pints.

When the amount of sugar had reached a minimum, and was found to remain constant at or near this level for several days, we considered that we had brought the patient into a state of *sugar equilibrium*, and proceeded to test the influence of drugs. Codeine in the form of the phosphate was first given, beginning with small doses and gradually increasing the amount exhibited until its effects appeared to have been fully ascertained. The drug was then slowly reduced in dose, and finally removed. After an interval of about a week (on strict diet and camphor water), which was sufficient to restore the patient to a condition of sugar equilibrium, morphine in the form of the acetate was commenced, and the dose, at first small, was steadily pushed, as with the codeine, as long as obvious effects continued to be produced on the excretion of sugar. The cases experimented upon were instances of genuine diabetes, the patients continuing to excrete 1,710 to 2,130 grains of sugar daily on strictly anti-diabetic diet.

Phosphate of codeine made an impression on the urine, diminishing the volume, lowering the sp. gr., and reducing the amount of sugar.

The maximum result was obtained about the fiftieth day of its administration, when no less than 27 grs. of the drug were being taken per diem by the man, 22 grs. by the boy. The sugar was never completely removed from the urine of the man, the minimum excretion being 620 grs. per diem. In the case of the boy the sugar disappeared for one day only, rising on the next day to 340 grs. Therewith the body-weight in the case of the man had risen from 122 lbs. to 128 lbs. in the course of seven weeks, and the physical vigor increased at the same time.

With the gradual reduction of the dose of the codeine the sugar steadily rose in amount—a further proof of the influence of the drug.

The effect of acetate of morphine upon the excretion of sugar was even more striking than the effect of the codeine—certainly more rapid and more powerful. The sugar fell steadily in amount, and finally completely disappeared when 5.8 and 6.3 grs., respectively, of the salt were being given per diem. The volume of urine declined from 1,700 c.c. to 1,000 c.c. in the boy, from 2,45 c.c. to 1,800 c.c. or less in the man; the specific gravity was lowered from 1046 to 1020 in the boy, from 1034 to 1012 in the man. The patients' condition otherwise underwent a corresponding improvement; the boy gained four and a half pounds in weight, the man seven pounds, and they

expressed themselves as feeling in excellent health. Most important of all from our present point of view, the patients were never found sleepy, or heavy, or dull during the day, but on the contrary bright, cheerful, and vigorous. Indeed it appeared as if the older patient suffered from insomnia, for he complained that he did not sleep more than three or four hours during the night. The pupils were slightly contracted in both cases; the boy continued to suffer from headache.—*Practitioner*, July, 1888.

Blodgett (A. N.) on a Case of Unusual Susceptibility to Sedative Remedies.—A woman of 24, in the fifth month of pregnancy, consulted the author on account of a burning and smarting sensation following urination, which was very frequent, and occasioned much suffering from a constant pain in the back, hips, and at the orifice of the urethra. A solution of bicarbonate of soda, containing in each teaspoonful two grains of potass. brom., sodii. brom., and chloral hydrate, with the addition of one-twentieth grain of morphia was ordered. This solution was prepared at six o'clock in the evening, and the patient took one teaspoonful at half-past six, one at half-past eight, one at 2 A. M., and one at 8 A. M. She slept in the intervals, but awoke at the times stated. At eleven of the day, she rose and dressed and walked about her apartment, but feeling very drowsy and becoming rather frightened, she telegraphed for her husband, who came to her at four o'clock. She was at that time sleeping soundly, could with difficulty be wakened, and had no idea of the time, of her surroundings, or of the circumstances attending her condition. She was found dressed, seated in an arm-chair, and sleeping, with her head resting upon the back of a chair. Her color was good, there was no lividity of the skin, the breathing was easy, free and natural, the pulse 72 and free, the skin a little cool, pupils dilated and sensitive, and the patient's condition was in no way otherwise changed from the appearances of ordinary healthy sleep. On trying to arouse her, there was no response to gentle measures, but by more vigorous methods she was sufficiently roused to open her eyes, to answer questions, and to give an account of her experiences. Two drops of the ordinary tincture of nux vomica were prepared in a little water, and the patient made to swallow it. She was then forced to walk and after a little time could stand, and was able to move by herself. On being left alone, she at once sank down without regard to her situation, and was immediately asleep, and had to be violently roused. About five minutes after taking the nux vomica there was a distinct tetanic convulsion of a moderate degree of intensity, which was not, however, repeated. She now began to show increased animation, and was soon able to go about unassisted, and after a half-hour was able to take a good dinner, and from this time was entirely free from any soporific influence.

The patient said afterward that she had once before been similarily affected by a small amount of medicine, given by a physician, which contained bromides. She did not know the composition of the present medicine, and had no idea that it contained these articles. There was no appearance of hysteria, and the case seems to be one of unusual susceptibility to the action of a class of drugs which are usually supposed to be comparatively mild in character, and to be safe in large doses.—*Boston Med. and Surg. Jour.*, Aug. 30, 1888.

Gaucher, Combemale, and Marestang on the Physiological Action of Hedwigia Balsamifera.—The experiments were performed with alcoholic and aqueous extracts of the bark of the root and trunk of the Hedwigia Balsamifera, a tree growing in the Antilles. It is found that its administration produces quick and considerable lowering of the temperature; paralysis, commencing in the hind quarters and gradually invading the entire body, and accompanied by general convulsions and dilatation of the pupil; vaso-dilator fibres most appreciable in the external ear; in toxic cases death is preceded by irregular breathing and heart failure. The sole lesion found on autopsy is visceral congestion, most marked when death has not been sudden.

The drug is thus seen to be a poison to nerves, an antithermal, paralyzing, convulsant agent acting on the cord, from the corda equina to the medulla. Its active ingredients are an alkaloid and a resin, the former of which is convulsant. The root exclusively paralysant and anti-thermic in the former respect, acting like curare.—*Gaz. hebd. des Sci. Méd. de Montpelier*, Oct. 13, 1888.

Venturini and Gasparini on the Local Anæsthetic Effects of Helleborein.—The authors conclude that: (1)

Helleborein, even in a very diluted solution, produces complete anæsthesia of the cornea, without irritating the conjunctiva or the cornea. The anæsthesia produced by this substance is of longer duration than that obtained with cocaine. (2) Though the anæsthesia is complete, there is no relaxation of the eyelids. (3) No change in the pupil or in the intraocular tension is observed. (4) Helleborein causes local anæsthesia in the parts into which it is injected. As, however, it has a powerful cardio-toxic effect, its application to the cardiac region requires great precaution.

They employ a one-per-cent. solution of the alkaloid of which they instil three to four drops into the eye. The full anæsthetic effect comes on in fifteen minutes and passes off half an hour later.—*Brit. Med. Jour.*, Aug. 4, 1888.

Thomson (W. H.) on the Combination of Cardiac Neurotics.—We all know that one of the commonest causes of cardiac dilatation and failure is not to be found in the heart at all, but rather in an obstructed arterial circulation. It is probable that arteries, narrowed in their calibre, are the cause of cardiac hypertrophy and subsequent dilatation, three times in adults, to valvular disease of the heart itself once; and just here it is that the employment of digitalis in heart-failure often disappoints us most signally, for, unfortunately, while it increases the contractile power of the heart, it also contracts the arteries, and thus often adds as much obstruction to the circulation in that way as it aids the circulation by its increase of the heart's propulsion,—a fact often illustrated in cases of dropsy in Bright's disease, where the condition of the systemic arteries is the primary cause of the anasarca.

It is in just such cases that nitro-glycerine can help us to administer the digitalis with more than double the beneficial effect of the administration of digitalis singly. Nitro-glycerine, by its universal and prompt relaxation of the whole arterial system, makes every stroke of the ventricles, stimulated by digitalis, not only more powerful but also far more effective in completing the systole with a short and heart-emptying contraction. Meantime, by its action in paralyzing the inhibitory action of the vagus, it insures a more rapid diastole, and, in many cases, I have found the intermittency caused by digitalis to disappear as soon as the effect of the nitro-glycerine is felt. The effect of this upon the anasarca in these cases is about as complete and gratifying as any remedial operation with which I am acquainted. But, on the other hand, the influence of nitro-glycerine alone, as I have noted in a number of instances, is almost *nil* on the dropsy, however much it often seems to have a beneficial influence on the secretory action of the kidneys by increasing the specific gravity of the urine.

In the new remedy, strophanthus hispidus, the profession, without doubt, has received a great addition to the list of cardiac stimulants. It is not our province now to enter upon the detail of the properties of this drug, except so far as to state that for functional derangements, like palpitation, we know of no superior to it, and that it has a particular effect to increase the power of the heart's contraction in a more regular and uniform, though not so powerful, manner as digitalis does. Meantime its contraction of the systemic arteries is very much less than that of digitalis, and its effect in increasing the specific gravity of the urine in chronic Bright's disease is much greater. I have never, in fact, succeeded in this respect with any other drug as with strophanthus. On the other hand, its combination with nitro-glycerine gives very much the same results on the circulation as the combination with digitalis, just mentioned, does, and hence I often give moderate doses of all three agents for the indications above specified in chronic obstructive conditions of the systemic circulation.

But it is in severe cases of acute disease that we meet with the most signal illustrations of the advantage of the combined action of cardiac neurotics. To prevent heart-failure until the patient can tide over the crisis becomes frequently the anxious problem in pneumonia, in sudden prostrations in fevers, in peritonitis, when the effect of shock in causing general arterial closure is so plain as a cause of cardiac exhaustion, and in many other cases of like conditions, and, I have no doubt, many practitioners will welcome some addition like this to the regulation brandy and ammonia prescription for such emergencies.—*Med. Record*, May 19, 1888.

Stirling (W. C. C.) on Pilocarpus in Erysipelas.—In most cases of erysipelas the author gives a purgative, fifteen drops of the fluid extract of pilocarpus

every three hours, and applies locally: salicylic acid ʒ ss, glycerine and rose-water āā ʒ ss, and water ʒ i. In adynamic cases he gives alcohol, iron, quinine, and extra food besides, while in sthenic cases he employs veratrum with the jaborandi.—*Atlanta Med. and Surg. Jour.*, Sept. 1, 1888.

Dreschfeld on Pyrodin; a New Antipyretic.—The active ingredient of this new antipyretic is acetyl-phenyl-hydrazin. This substance is a powder, which is very sparingly soluble in cold water; it has no unpleasant taste, and produces neither nausea nor vomiting. It acts much more quickly and powerfully than antipyrin, antifebrin, or phenacetin. It reduces the fever temperature within a few hours, and keeps the temperature down for six or eight hours; this reduction is followed by a rise, and this is succeeded by a second fall, so that rarely more than one dose need be administered within twenty-four hours. The reduction of temperature is associated with sweating, but neither collapse nor rigor has been observed, though in some cases the reduction of temperature amounted to 7° F. The drug has been found especially useful in pneumonia, typhus, and scarlet-fever; in typhoid-fever the antipyretic properties are equally well marked, but slight toxic effects are occasionally noticed after a few doses have been given. The powerful antipyretic properties are also noticed in non-zymotic, inflammatory fevers, such as peritonitis. It acts well also in cases of migraine, even when antipyrin fails. Given in repeated doses of eight to twelve grains, pyrodin is apt to produce toxic effects; these consist in the appearance of jaundice, due to commencing hæmoglobinæmia, as was proved by a series of experiments on rabbits. The dose of pyrodin for children is three to four grains, for adults eight to twelve grains. *Br. Med. Jour.*, Oct. 20, 1888.

Long Continuance of Large Doses of Antifebrin.—The dangers of large and long-continued doses of antifebrin have, from the first appearance of the drug, been impressed upon us. It would appear, however, that all persons are not alike susceptible of injury from its employment. A case in point was recently reported by Dr. Richter, of Glatz, in which a patient suffering from cardiac dilatation, dyspnœa, and anarsarca, was also the subject of left-sided cervico-occipital neuralgia. No medicine seemed to relieve the severe neuralgic pain, except morphia, the continual use of which was, for obvious reasons, not advisable. On the 30th of August, 1887, antifebrin was begun. Fifteen grains were given early, and in an hour 7½ grs., twelve hours later 15 grs., and in another hour 7½ grs.; altogether 45 grs. daily. After several days the pain had so far subsided that 7½ grs. given in one dose sufficed to keep the pain away for the day. From August 30th to December 31st, 1887, 7 ounces were given, and from January, 1888, to date of writing, over 10 ounces, and without any ill effects. One hour after taking the antifebrin the pain disappeared, and not to return for the next twenty-four hours.—*Med. Press*, Oct. 17, 1888.

SURGERY AND PATHOLOGY.

Ballance (C. A.) on Trephining the Sternum for Mediastinal Abscess.—The patient, aged thirty-five, was admitted August 31, 1887, complaining of a discharging abscess over the front of the upper part of the chest, accompanied by constant and severe pain and great tenderness along the breast bone; also of fever, anorexia, loss of strength, and want of sleep. There was a history of inflammation of the lungs two years before; for three months there had been mid-sternal pain, and a lump had formed, into which an incision had been made and much pus evacuated. This was followed by a discharging sinus, which, on admission, was found to lead down to bare bone at the left second costo-sternal articulation, and the probe could be passed still farther into a space behind the gladiolus. The sternum itself was acutely tender on palpation, and was the seat of constant dull, aching pain. Another swelling had formed over the left fourth, fifth, and sixth costal cartilages, and the discharge from the old sinus was less copious than usual. Two days after admission the lower swelling was incised, and the old sinus laid freely open. During the next five days rigors occurred, and it was decided to explore behind the sternum for pent-up pus. Two trephine holes were made, and the intervening portion of bone cut away with forceps. The bone removed was found permeated by pus, and

on looking into the anterior mediastinum a layer of thick creamy pus was seen on the front of the pericardium; this was carefully syringed away, and much carious bone was then scraped by means of a Volkmann's spoon from behind the sternum. Finally the wound was irrigated with sublimate lotion, packed with wet sublimate dressing, and covered with a dry dressing of the same character externally. The patient made a rapid and complete recovery, the sternal opening becoming filled in by fibrous tissue. The two most prominent symptoms of mediastinal suppuration appeared to be dyspnœa and constant severe pain. The sternum had been trephined for abscess of foreign body in the mediastinum, for paracentesis pericardii, and the operation had been suggested in order to facilitate the ligation of the innominate artery.—*Lancet*, Oct. 20, 1888.

[In the *Jour. de Méd. et de Chir. Prat.*, Oct., 1888, Grancher narrates a somewhat similar case. The patient, a child of eleven, apparently had scarlatina with disease of the bronchial glands. A scarlatiniform redness covered the whole body, and there was an œdema of the entire upper part of the chest and the upper extremities.

At the autopsy there was found a purulent collection surrounding the arch of the aorta and extending up along the carotid where a suppurating gland was found. The tissues about the œsophagus and trachea were infiltrated with pus. The tracheal and bronchial glands and the thymus gland were enlarged and soft but not suppurating.]

Steele (C.) on a Case of Deficient Œsophagus.—I was lately asked to see in consultation an infant twenty-four hours old, who, shortly after being given nourishment, a little of which was taken readily, became very livid, had difficulty in breathing, and then returned the food and appeared no worse. The gentleman in attendance wisely introduced a sound, and found that it passed about five inches and encountered an impassable obstruction. He then asked me to see the child, and I repeated the sounding with the same conclusion. We diagnosed that there was either a membrane across the œsophagus, or that it ended in blind terminations; and I advised that through the night enemata of dessertspoonfuls of peptonised milk should be given every two hours, and that by daylight the stomach should be opened and the œsophagus explored. The infant took chloroform well. I opened the abdomen above the umbilicus in the middle line, exposed the stomach, and stitched it at four points to the skin, having some difficulty to keep the liver from protruding. The stomach was then opened, was perfectly healthy, and of course empty. A bougie was passed down the œsophagus as before, and another upwards from the stomach for a short distance; but they did not approach each other by what we judged to be an inch and a half. I then cut a gum-elastic catheter in half, and passed it from below, introduced up it a long slender steel probe, and pressed it upwards as much as was justifiable, in case the lower part of the tube might be twisted or narrowed, and capable of being rendered pervious. All was of no avail, however; so the stomach wound was closed with sutures, also the abdominal wound, and we felt sure that the œsophagus was deficient for about an inch and a half. The infant slept for some time, and died twenty-four hours afterwards. The next afternoon we made an examination, and found that the œsophagus terminated above and below in blind rounded ends an inch and a half apart, and there was no cord or connection between the parts. All the wounded portions were quite healthy, and the appearances led to the conclusion that had there been only a membranous occlusion a happy result might well have been hoped for.—*Lancet*, Oct. 20, 1888.

Ducket (C. A.) on Ante-Sternal Dislocation of the Clavicle.—A strong, well-made man of 28, of active habits, applied at the Ancoats Hospital on August 28th. He stated that, while swimming upon his left side, he endeavored to turn upon his back, during which action he "felt something give way in his neck." When I saw him, there was a marked projection of the sternal extremity of the left clavicle forwards, inwards, and somewhat downwards upon the anterior surface of the sternum, over which the integuments were tightly stretched. Scarcely had I placed my hand upon the swelling, when the bone suddenly flew back into its place, with which the deformity disappeared. As there seemed to be no tendency for the clavicle to again leave its socket, the only treatment I adopted was to keep the man's arm at rest by placing it in a sling. I have

lately seen the patient, and the joint is in its natural position, but it will be interesting to note whether it will remain so as soon as the man resumes his ordinary avocation.—*Lancet*, Oct. 6, 1888.

Powers (C. A.) on Cancer of the Breast in a Man.[1]—The man was about seventy years of age. The family history was negative. About eighteen months ago he fell heavily on the sidewalk, striking the right arm and right side of the chest, which was ecchymosed. Twelve months later a hard lump appeared in the right breast. Dr. Powers saw the patient in July, 1888, at which time the tumor was half the size of a man's fist, involved the upper and outer region of the right breast, was circumscribed, and of stony hardness. The skin was retracted about the nipple, the axillary glands were markedly enlarged. July 20th he removed the breast and axillary contents. Convalescence was rapid. Dr. Ferguson pronounced the tumor typical cancer. An interesting point in the case was the development of cancer directly from traumatism. He had found that during the past ten years one hundred and seventy cases of cancer of the breast had been admitted at the St. Luke and New York Hospitals, and of these but one was in the male. Dr. Gross had found about two per cent. of the cases of cancer of the breast to be in males.—*Med. Record* Oct. 20, 1888.

Morrison (A.) on Extensive Ankylosis of the Skeleton, with Diaphragmatic Breathing.—The patient was a male, æt. 43, of neurotic and rheumatic family history, and himself rheumatic. His present condition seemed likewise to be related to an attack of gonorrhœa. The joints chiefly involved were both shoulders, both hips, all the ribs, and the vertebral column. The knees were almost, but not quite stiff, the head was twisted to the left shoulder, he had talipes equinus of the right ankle, and some softening of the interior maxilla and the auditory ossicles. Thoracic respiration was abolished, and its place taken by exaggerated abdominal breathing. The expiratory capacity of the chest was reduced to 96 cubic inches from a probable average of 156 cubic inches. The pectoral muscles were atrophic. The daily excretion of urea ranged from 210 to 276 grains per diem, and the patient had recently begun to deposit fat in excess.—*Med. Press*, Oct. 17, 1888.

Fenwick (E. H.) on the Prognostic Power of the Cystoscope and the Bloodless Method of Removing Vesical Growths Controlled by Electric Illumination.—An old gentleman had had a painless hæmaturia of five weeks' duration. By means of the cystoscope a russet-gray, lobulated growth was seen to be hanging by a pedicle from the anterior wall of the bladder. The mucous membrane in the immediate neighborhood had an injected nodular appearance extremely suggestive of commencing carcinoma. A large lithrotrity tube was passed, the eye directed towards the place where the tumor had been, and suction was made. On the third attempt the growth was brought away, and seemed to be a necrotic mass and blood-clot. A patch of stunted processes (atrophied villi ?) was seen where the stalk had been attached. The sequel of this case is interesting.

Three months later the patient was still looking hale and hearty, and declaring himself in the best of health. His general condition gave no indication of carcinoma, and the writer doubted its existence, believing that he had been optically deceived as to the nature of the group of nodules on the mucous membrane. He therefore re-examined him, and was somewhat astonished to see that the group of isolated nodules had grown into a confluent walnut-sized tumor, which was deeply cleft, lobulated, and of a gelatinous aspect, a growth which he at once recognized as a succulent epithelioma.—*Br. Med. Jour.*, Sept. 22 and Oct. 13, 1888.

Page (F.) A Case, Where from Congenital Deformity, a Man Aged Fifty-four Years has Passed His Fæces and Urine by the Urethra all His Life.[2]—A. B., aged 54, a small-built man of a peculiar dark complexion, not unlike that of a person suffering from Addison's disease, was admitted May 21, 1888, and gave the following history. Immediately after birth it was discovered that fæces and urine were passed from the meatus urinarius, and that the anus was imperforate. An attempt was made by a surgeon to establish an anus in the natural situation, but the operation was not successful ; fæces and urine still passed

[1] See MEDICAL ANALECTIC, 1886, p. 195 ; 1887, p. 567.

[2] See MEDICAL ANALECTIC, 1888, p. 507.

by the urethra, though fluid has from time to time escaped from the anus. At the age of 10 years the urethra became blocked by the hardened fæces. Relief was obtained from an incision into the urethra immediately in front of the scrotum, and through the fistula thus formed the patient has continued with great difficulty and discomfort to pass his fæces and urine. He says he is in the habit of taking aperient medicine daily, and has to squeeze his fæces and urine from the meatus. Sometimes, too, the urethra became blocked, and then the patient has passed his fæces through the fistula and his urine by the fistula and from the anus, till he has succeeded in displacing the obstruction. His urine is generally clear and natural in appearance, but sometimes there is a brown deposit from it, and it has a fæcal smell. He has been married twenty-four years, and is the father of one child.

Latterly, the fistula has contracted, and thus his difficulty has been increased. Three days before admission the urethra became blocked, and being unable to remove the obstruction, he found himself, to use his own expression, fast, and was compelled to seek assistance. Upon examination, a fistulous opening into the urethra was found immediately in front of the scrotum, along which a probe passed readily towards the bladder. On attempting to pass the probe in the opposite direction, its progress was arrested by a hard substance firmly impacted in the urethra; the anal aperture would just admit a probe into the gut.

On May 25th, the urethra was slit up through the fistula for an inch and a half, and the substance blocking the canal, which was again a piece of hardened fæces, removed, The mucous membrane was then secured to the skin with sutures, and the fistula thus converted into a good-sized opening, through which he has continued to pass his fæces and urine so satisfactorily, that he is unwilling to submit to any other operation.

October 3d.—The patient reported himself to-day. He has to a considerable extent lost his dark, unhealthy complexion. His bowels act regularly without medicine, and he says he is more comfortable than he has ever been in his life.—*Lancet*, Oct. 20, 1888.

Wilson (J. S.) on Aphasia Occurring during the Secondary Stage of Syphilis.—A woman, thirty-eight years of age, came under observation February 7, 1888, with her first venereal trouble. She firmly denied all subjective and objective symptoms of a previous syphilitic history. She presented herself with a diffuse papulosquamous eruption of four weeks' duration, and had adenopathies and osteocopic pains, but no alopecia or sore-throat. She was put upon hydrarg. iod. virid., gr. ¼, t.i.d. She then pursued an uneventful course until May 1st, when she began to complain of a severe localized headache, which was worse at night. This resisted antipyrine by mouth and hypodermatic injection. At this time, her gums becoming tender, the inunction of hydrarg. oleat. was substituted for the protoiodide, and in addition she was given potass. iod. in increasing doses. Suddenly, on the afternoon of May 12th, she was attacked with ataxic aphasia. The only word she spoke was "Yes." She answered "Yes" to every question, but realized her mistake. On the following day she said "All right," and from that time her vocabulary has gradually increased, until three months after the attack of aphasia she has full control of her speech. During the attack she understood remarks addressed to her, but answered with "Yes" or "All right."

At this time her pulse, respiration, and temperature were normal; there were no convulsions or mental disturbances. Diminished sensation and reflexes were observed in the right upper extremity, with paresis of the same part, and also of the right side of the face.

Pupils equally dilated; respond to light and accommodation. Possibly it may be said her aphasia was accidental and intercurrent, and wholly unconnected with her syphilis. In answer to this we find an absence of the usual causes of aphasia, such as alcoholic history, atheroma, cardiac and pulmonary history, traumatism, mental tension, etc.—*Med. Record*, Aug. 18, 1888.

Damages for Syphilitic Infection.—An action has just been decided in the French courts in which a wet nurse sued the parents of a child to whom she had given the breast, with the result of contracting syphilis herself and giving it to her own child. It transpired that a previous child, belonging to the same parents, had died with symptoms pointing to congenital syphilis, but not until the nurse who had charge of him had become infected and had communicated the disease

to her husband. Notwithstanding this equivocal history the defendants accused the nurse of having been the source of the infection, but the medical experts appointed by the court failed to find any evidence supporting this allegation. Besides, the presence on the breast of the primary lesion in the nurse in itself constituted sufficient proof of the origin of the disease so far as she was concerned. The defendants were fined 100 francs each, with 2,000 francs damages. This matter of the contamination of nurses by children, or vice versa, is one which is of great importance in France, where the habit of employing wet nurses obtains to a much greater extent than in this country. Its medico-legal bearings are therefore well established.—*Med. Press*, Aug. 24, 1888.

Pierrepont (J. H.) on a Queer Case of Malingering; Cantharidal Eruption, etc.—A white woman, unmarried, aged about twenty-two years, was admitted for a sprained ankle. Excepting the sprain, which was a simple one, she was otherwise in perfect health, weighing then about 160 pounds. The surgeon in charge treated the sprain by counter-irritation, using a fly blister.

The case progressed favorably, but when Dr. S. informed her that she could take her discharge the next day, that night she had what she termed, a "breaking out" on the left forearm from the elbow to the wrist. On examination the doctor found the arm covered with large bullæ, which very much resembled pemphigus. After letting out the serum, a soothing application was used, which caused the raw surface to heal in about a week.

When the doctor again spoke of discharging her, there was a recurrence of the eruption on the right arm, resembling in every respect the former attack, and which was treated in the same way. The vesicles were exactly like those produced by a fly blister, some of them measuring as much as two and three inches long. This state of affairs continued during Dr. S.'s administration, no remedy he used benefiting her in the least, and the eruption continued to make its appearance on one arm as soon as it disappeared on the other.

Dr. S. was succeeded by Dr. R., who experienced the same difficulties in treatment, and with the same result, no cure. The only change was that the eruption, which had previously confined itself to the arms, now attacked the legs in the same way, from the knee to the ankle. Dr. I. succeeded Dr. B., and this was the state of affairs which confronted me when I succeeded Dr. I.

The last eruption had involved the right knee, and after evacuation of the serum, had left an extensive raw surface which was unusually painful. When this had healed, and it appeared that she would be well enough in a few days to take her discharge, the nurse came to me in great haste and reported L. W. dying. Upon reaching her bedside, I found her in a state of profound coma; pupils normal but insensible to light; respiration very shallow and jerky; radial pulse barely perceptible and dichrotic; surface cold and clammy, and covered with large drops of perspiration; prolabia cyanosed.

Cardiac stimulants were immediately administered, among which may be mentioned nitrite of amyl by inhalation, whiskey hypodermically, hot bottles to extremities, etc. Her pulse and respiration improved, but she remained unconscious until five o'clock the next morning.

On opening a bundle of clothing that the patient always kept under a table at the head of her bed, a fly blister about a foot wide by two long was discovered *and the mystery solved.* The blister was made of two thicknesses of cheese-cloth, with the fly ointment in a thin layer between, so that she could apply it at night and remove it the next morning before any one observed her. A supply of the ointment, that had been stolen from the nurse a few months before, was also found in the bundle.

After the effects of the poison, which had been suspected, and afterwards confirmed, had left the patient in a condition to be questioned, she made a full confession, and stated that she had stolen some medicine from the nurse's safe, and had taken it in preference to using the blister, her object being to make herself sick enough to remain in the hospital where she fared better than she would in the "poor-house," where she would go when discharged. This appeared her sole reason for, as she expressed it, "fooling the doctors."

The medicine referred to was a compound prepared in the hospital containing bromide of potash, hydrate of chloral, fld. ext. of gelsemium, and tinct. of hyoscya-

mus. The quantity taken was about five times the maximum dose.

Another point must be mentioned here which added to the obscurity of her supposed disease, but which should have aroused our suspicions, viz.: Whenever the eruption occurred she complained of severe pain in her kidneys, at which times her urine had a peculiar pinkish hue, and on standing deposited a white sediment, about an eighth of an inch in an ounce phial. But the analysis of the urine proved unsatisfactory. Specimens examined at varying intervals gave the following results: Slightly acid reaction, sp. gr. normal; no albumen, although it had the appearance of containing blood, nor could any discs be detected when subjected to microscopical examination. The deposit proved to be calcium, probably pink face-powder, which would account for the color imparted to the specimens.

A specimen of urine taken directly from the bladder was found to be *perfectly normal.*

The pain she complained of in her kidneys, was no doubt caused by the blister, and was real. It is certainly a wonder that the continual application of the blister did not set up organic change, since there was considerable inflammation following every application of the blister.

Another remarkable feature which was not understood, but was wondered at previous to the above disclosure, was that the eruption invariably made its appearance at night.—*Va. Med. Mo.*, Sept., 1888.

Henry (J. N.) on Yellow Fever.—The following case is of extreme importance as showing that, whatever be the specific germ or poison of yellow fever, it does not always permeate the placental circulation. The author, while at Panama in July, 1885, was called to attend two cases of yellow fever; a boy of eight and his mother, who was nine months pregnant. The boy died from exhaustion on the fourth day.

"That night I was called at 9.30, and found that uterine contraction had begun, the os being quite dilated. Three hours later she gave birth to a living and apparently healthy boy, after a normal but rather weak labor. Following upon this there was more or less uterine hemorrhage, which was easily controlled by ergot. The next day the patient seemed to improve; her mind was quite clear, her temperature 100.5°, and there was no vomiting. I then began to have slight hopes for her life. At 5 P.M. I was once more suddenly sent for and found the woman in a condition of partial collapse, temperature subnormal, 97.5° F., pulse rapid and thread-like, respirations 43 to the minute, and ejecting vast quantities of coagulated blood from the stomach—in other words, black vomit, my efforts to stop which proved fruitless. Neither the subcutaneous injection of ergotine nor the external application of ice seemed to have the slightest effect on her. She died at 10.45 in a comatose condition. The strange part of the history is that the infant born during the height of yellow fever of the mother and in such fearful hygienic surroundings survived, and two months and a half later was as fine and healthy a specimen of a male baby as I have ever seen, and up to that time, when I lost sight of him, had not had a day's sickness since his birth."—*N. Y. Med. Jour.*, Oct. 27, 1888.

Stephenson (F. B.). Precautions against Infection.—The mortality among physicians attending the sufferers from yellow fever in Florida leads the author to think that the following suggestions may be of use:

1. Avoid all unnecessary exposure.
2. Stand rather than sit beside the patient's bed, and remain as much as possible near the bottom rather than the head of the bed.
3. Keep a little off for a few seconds when the bedclothes are turned down.
4. If near-sighted, draw the breath and hold it hard before looking at the tongue, or narrowly at any other part of the patient.
5. Never stethoscopize unless it be absolutely necessary; when necessary, expose the patients chest for a few seconds before beginning, hold the breath on a full inspiration while making the examination, and be quick about it.
6. After finishing with one patient, go into the middle of the ward for a few seconds to draw your breath a bit before beginning with another.
7. Never enter a fever ward in the morning without breakfasting, or, if at a too early hour for that, without taking coffee.
8. Have a ward coat, to be cast off and ventilated after getting into quarters.
9. Enforce regular ventilation.

The chief merits of these rules are that

they are obvious in their object, easily acquired so as to become a habit, and such as may be practised without exciting any attention from by-standers.

These precepts, though formulated for hospital service by a scientific practitioner of a past generation, appear adaptable to the daily life of medical men in private practice. *Med. Record*, Oct. 27, 1888.

Grandin (E. H.) on Abscess of the Vesico-Vaginal Septum.—The patient, a married woman, consulted the author 5 years ago for a small protrusion of the anterior vaginal wall just under the urethra, which was tender and interfered with coitus. It was diagnosed a cyst and soon burst of its own accord. Two years later, after repeatedly recurring and rupturing, it was found to extend from the urethro-vaginal junction midway up the vagina. An operation was again refused. Within the last few weeks, coitus having become impossible and dysuria constant the patient consented to an operation. The swelling now occupied the entire anterior vaginal wall. On being incised it was found to be an abscess, the walls of which were curetted and the cavity packed with iodoform gauze—granulation was perfect.—*N. Y. Med. Jour.*, Sept. 15, 1888.

Cartledge (A. M.) on a Rare Vaginal Tumor.—A woman of 34, mother of six children has experienced six abortions. She gave the following history: February 8th, of the present year, after menstruating two days she noticed an enlargement in the vagina which she thought was a blood-clot. On closer examination she found this to be an error, as manipulation failed to remove it. The growth—for such it proved to be—was then the size of a small hen's egg. Very soon after this she noticed a constant, scant, watery secretion, offensive in character, and began to suffer considerable pain in right inguinal and hypogastric regions. The discharge continued, becoming less offensive. Did not menstruate again until the latter part of April; in the meantime her general health had declined, and troublesome constipation developed. Menstruated in June, rather more profusely than usual. From this time until July was in bed most of the time, suffering severe pain in the lower part of the abdomen. During menstrual period of July lost much blood. She menstruated the 15th of August, again bleeding profusely. On August 23d, the woman was very weak, had been constantly confined to bed for three weeks. Digital examination revealed the vagina pretty well filled with a growth which could be seen by separating the labia. The part presenting at the vulva was of a bluish-purple color.

On August 25th, the patient was anæsthetized and the vagina cleansed by a carbolized douche. The tumor was found to be attached to the posterior vaginal wall, about an inch within the ostium vaginæ, by means of a pedicle the size of the finger and two inches long. Instead of hanging down, the tumor extended up to the vaginal vault. Its pedicle was ligated and then cut off with a wire ecraseur. The tumor was about the size of a clenched fist and was found on microscopic examination to be a fibro-sarcoma.—*Am. Pract. and News*, Oct. 27, 1888.

Schenck (W. L.) on Repair of a Ruptured Chorion.—June 1, 1888, a woman was thrown from a heavy farm wagon which, turning over, struck her across the lower portion of the abdomen and hips with such force that she was unable to move her body or legs for several weeks. She was seven months advanced in her sixth pregnancy. Active uterine pains came upon the second day after the injury, the membranes rupturing on the third with a free discharge of liquor amnii. Despite hypodermic injections of sulph. morph. and atropia, rectal enemata of tinct. opii., etc., the os dilated and the pains and discharge continued for three days, the pains steadily growing less forcible and the waters less abundant, when both ceased and there was gradual improvement in the general condition, but any attempt to walk was accompanied by a free movement of the pubic bones at their symphisis and severe pain in the right side and hip, and she maintained an almost immovable decubitus.

On the 4th of August, at the end of her 280 days, labor came on and progressed rapidly, the membranes rupturing early, and on reaching the house a healthy boy of 9 pounds awaited my arrival. I removed the secundines, which were buttonholed in the vagina, and carefully examined them. The rent in the chorion through which the child had escaped was near its centre. About midway between this and its attachment to the placenta there was a triangular fold in the membrane, that had united by adhesive inflammation. The chorion was

separated from the amnion throughout one fourth its extent, the inner membrane being thickened and presenting on its outer surface—in the vitriform body—an ecchymosed appearance, the spots of blood varying in size from a pin-point to ⅛ inch in diameter, and being covered with a delicate film of membrane.—*Jour. Am. Med. Assn.*, Oct. 27, 1888.

Peabody (G. L.) on a Pin Imbedded in a Woman's Heart.—The patient died at the New York Hospital the 26th of last May. She was under observation only a few hours. On admission she was suffering greatly from dyspnœa and was unable to give a circumstantial account of her illness. For some time previously she had passed less urine than normal, and her feet had been swollen. She suffered from constipation, vertigo, spots before the eyes. Her appetite was poor, bowels regular. Temperature 108.8°, respiration 44, pulse 130 The specimen of urine was of a yellow color, acid in reaction, and of a specific gravity 1,020, with albumen, epithelial casts, and pus cells. Her chest contained a large amount of fluid ; moist râles both behind and in front. No murmur. Heart-sounds very feeble. Œdema of feet and legs. She was given acetate of potash and infusion of digitalis, and passed a fairly comfortable night. The next morning she seemed to be doing fairly well, when she suddenly experienced great precordial pain, distress, and intense dyspnœa. She was given morphia subcutaneously, but she continued to suffer until death came to her relief in half an hour.

At the post-mortem a black, eroded pin, the top of the head of which was free in the left ventricle, was seen piercing one of the papillary muscles attached to the anterior segment of the mitral valves, and penetrating the wall of the ventricle obliquely to the depth of a little more than an inch. The point of the pin was distant one fifth of an inch from the external surface of the heart. There was no evidence of any recent inflammation in this neighborhood, but the endocardium about the protruding head of the pin was greatly thickened and snow-white, and firmly adherent to the edge of the head. A most careful examination failed to reveal the route by which the pin had travelled to its present location, and it is interesting that it should have remained for a long time free in the cavity of the ventricle without producing thrombosis. The pin had evidently been in its present situation a long time, and in all probability had entered the body by the mouth.—*Med. News*, Oct. 20, 1888.

Judkins (W.) Distended Bladder Complicating Intestinal Obstruction.—A woman of 64, a hemiplegic, for one week had had no evacuation from the bowels. The abdomen was markedly distended with a tumor which gave to the sense of touch a doughy feel. Occasional hiccough. Vomiting more or less, aggravated when any nourishment was taken.

Bladder acted every two or three hours—what was considered a fair quantity being passed.

For the constipation, domestic remedies with some patent medicine had been employed for three days. During the 48 hours that she lived nearly a drachm of croton oil was taken in divided doses. Rectal injections of hot water were given frequently but were regurgitated and no good result was had either from the croton oil or the water.

Laparotomy was insisted upon but was vehemently objected to.

The patient remained conscious until four hours before death, when she became comatose and died, at which time a large quantity of water escaped from the bladder.

At the post-mortem the bladder mounting up under the ensiform cartilage was disclosed filled with urine. At least a bucketful was removed. Right kidney was badly degenerated, breaking down on slight manipulation. Fortunately the diagnosis of invagination was verified by the detection of a knuckle of intestine bound down by recent adhesions. The large gut had atrophied in parts to the size of a finger. —*N. Eng. Med. Mo.*, Nov. 15, 1888.

Brown (L.) on Two Cases of Primary Carcinoma of the Vagina.—The first patient was a woman of 54. From the summer of 1886 up to the time of admission to the hospital she had frequent attacks of pruritus, an almost constant thin watery discharge, at times bloody, of an offensive odor, and some pain.

When admitted to the hospital (March 27, 1888) the uterus was freely movable, the cervix was normal, as were the upper two inches and a half of the posterior vaginal wall and about an inch of the upper part of the anterior wall. The anterior wall from this point above to within

about half an inch of the urethral meatus was infiltrated and thickened, and presented to the touch numerous elevations, all of which bled easily under the examination.

The posterior vaginal wall presented only a small area of infiltration without any ulceration. At this point the vagina was slightly contracted, though not extensively enough to interfere with a thorough examination of both uterus and vagina.

The second patient was a cook of 39. For the previous two months she had been gradually losing flesh, and did not know the cause. She had experienced no pelvic pain whatever, and only now and then some loss of blood.

Upon her admission, the general condition of the patient was poor, she being emaciated, cachectic, and very feeble. The vagina was filled up with a cauliflower growth almost protruding from the vagina, and bleeding freely under the examination. Upward it extended beyond the reach of the finger.

By rectal touch it was found that the intestinal mucous membrane was not involved. The mass plainly pressed the anterior wall of the rectum backward. Farther up could be felt a space, of about half an inch in extent, between the growth and the cervix. Through this portion of the recto-vaginal septum the cervix could be felt apparently normal, and could be easily made out; also the uterus could be freely moved.

She died two weeks after entering the hospital, and no autopsy was allowed.

These two cases are of especial interest from the rare location of the neoplasm. Its unusual occurrence in this situation is very striking. Hart and Barbour state that Biegal collected 8,287 cases of cancer of the vagina, with only 14 out of the number as primarily occurring in this locality. Dr. Parvin, of Philadelphia, cites Grammatikati as stating that only *thirty-eight* cases have as yet been published.—*N. Y. Med. Jour.*, Sept. 8, 1888.

Syme (G. A.) on Angular Curvature of Spine; Compensatory Changes in Vessels of Neck; Strumous Kidney.—The specimens were removed from a dissecting-room subject. The sixth and seventh cretical vertebræ were affected, their bodies being fused; the angle of curvature was exceedingly acute, the spinal canal being much diminished. The bodies, spinous and articular process, were firmly synostosed, and there were no signs of active disease, or of caseation or cretification of inflammatory products. The carotid and vertebral arteries have become curved and twisted in a most extraordinary manner to become accommodating to the shortening of the neck. Before dissection, the right carotid formed quite a tumor from the manner in which it was folded on itself in a sort of S curve, the angles of the S being very acute; the right vertebral passed down into the thorax over the first rib, then out, and again made a curve with the convex outwards, before entering the foramen in the sixth transverse process. The vessels on the left side were curved in like manner, but not to the same extent. The left kidney from the same patient was simply a capsule filled with cheesy matter; the right kidney was apparently normal.—*Australian Med. Jour.*, Sept. 15, 1888.

BOOK NOTICE.

A Clinical Atlas of Venereal and Skin Diseases, Including Diagnosis, Prognosis, and Treatment.—By ROBERT W. TAYLOR, A.M., M.D., Surgeon to Charity Hospital, etc., etc. Illustrated with 192 figures, many of them life-size, on 58 beautifully-colored plates; also many large and carefully executed engravings through the text. Folio, 14 x 18 inches. Philadelphia: Lea Brothers & Co., 1888. To be completed in eight parts, comprising about 400 pp. of text. Two parts to be issued every two months. Price per part $2.50. For sale by subscription only.

As its name implies, this elegant work is a clinical atlas and text-book combined. Part I. on venereal diseases, contains chapters on gonorrhœa in the male and female, phimosis, herpes progenitalis, vegetations, balanitis, and the chancroid, closing with some inaugural pages upon syphilis.

Part II. takes up the study of syphilis where it was left in Part-I., and carries it through its primary and partly through its secondary stage. Too much praise cannot be awarded to the work as a whole, to the printing and plates as works of art, and to the subject-matter of the text, of such scientific worth as to merit a place as an authority on the subject handled.

In no specialty is pictorial delineation of lesions so important as in the study of dermatology and venereal diseases. This fact has long been appreciated, with the natural result of bringing into existence very many atlases of varying accuracy and worth. From some of these our author has borrowed figures or plates, where original paintings from life, gathered by him during many years of practice, did not suffice. After a critical survey of illustrations and text, it only remains to be said that each is as nearly perfect as possible, and the two combined, form the most excellent work of its kind in the English language.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of

CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital; CONDICT W. CUTLER, M.D., Instructor in Diseases of the Skin, Post-Graduate Medical School, New York; JOHN S. HAWLEY, M.D., Attending Gynæcologist, New York Hospital, Out-Patient Department; FREDERICK PETERSON, M.D., Lecturer on Nervous Diseases at the New York Polyclinic.

VOL. V., No. 46. November 15, 1888. WHOLE No. 94.

CONTENTS.

	PAGE
Medicine and Pathology	545
Therapeutics	551
Miscellany	554

MEDICINE AND PATHOLOGY.

Auriol on Puerperal Ulcer of the Stomach.—A woman of forty-eight, after her fifth confinement, arose and went to work on the fifth day. The next day the lochia became fetid, fever set in, and she had to go back to bed. A phlegmasia of the left leg appeared on the tenth day, and on the twelfth the right leg was similarly affected. The fourteenth day, after acute pain in the epigastric region, she became nauseated and vomited considerable blood, and passed some clots from the bowel. She soon lost consciousness, and remained in a state of syncope for several hours.

Perchloride of iron was given by the mouth, ice was applied to the epigastrium, and morphine was injected for the pain. Two days later a nearly fatal hemorrhage took place, and for some days afterward bloody stools were passed. Chloroform water relieved the pain, no more hemorrhages occurred, and complete recovery took place.

In a second case perforation occurred and death resulted.

A woman of thirty-nine resumed her work five days after her second confinement, which was difficult and necessitated instrumental interference. On the sixth day she had a violent chill, the lochia became fetid, and the abdomen became swollen and very painful. The uterus remained enormous. Sublimate intra-uterine injections and quinine in large doses were given. The eighth day double phlegmasia and a typhoid condition with high fever set in. The tenth day the patient appeared better, a curetting of the uterus having brought about a purulent discharge, but in the evening with a sharp epigastric pain came the vomiting of blood. Collapse ensued, relieved only by injections of ether and enemata of champagne. During succeeding days bloody stools and acute epigastric pain continued. On the fifteenth day the patient had a new hematemesis, and passed a large quantity of blood by the bowels. Her abdomen became suddenly distended, and death resulted in a few hours. The author, as does Létulle,[1] thinks these ulcerations are produced by obstruction of small arteries by infectious emboli.—*Jour. de la Soc. de Méd. et de Phar. de l'Isère*, Sept., 1888.

Auvard on Septicæmia of Mammary Origin.—A woman of twenty-three, after a normal delivery, was given a vaginal injection, as was customary in the hospital. The lochia were not fetid, nor was there abdominal pain. On February 10th[2] the patient had two chills and experienced acute pain in nursing her infant. The next morning another chill occurred, and there was found on the upper part of the base of each nipple a fissure 2 millimetres deep by 15 mm. long. Both were covered by a slightly adherent grayish film.

The right breast was red, and there was a lymphangitis, seen as painful reddish lines running from the breast toward the axilla, where the glands were swollen and painful. The patient had headache, a slight diarrhœa, a dry, cracked tongue, and a temperature of 101° F. The lochia remained normal.

[1] THE MEDICAL ANALECTIC, July 19, 1888, p. 341.

[2] The date of confinement not stated.

The fissures were cauterized with nitrate of silver, iodoform was sprinkled over them, and a compressing dressing applied. Nursing was suspended and the next day, although the breasts were less tender, the temperature remained high—102°—morning and evening; the tongue became dryer and the appetite almost nil. On the separation of the sloughs the fissures were again cauterized and dressed with iodoform, after being washed with sublimate.

On February 13th the breasts were less painful and the temperature lower, and the breasts were dressed without being cauterized.

The next day the patient had improved considerably, and, though by no means well, insisted on leaving the hospital.—*Le Courrier Méd.*, Sept. 1, 1888.

Hamill (R. H.) on Puerperal Rheumatism.—The course of the disease is chronic, lasting from one to six months.

The prognosis is favorable as regards life, but unfavorable as regards the subsequent usefulness of the limb. In only five cases out of the twenty-three was there complete cure; the pregnant and puerperal state, the absence of marked febrile derangement, the constant localization in the knee-joint or some equally large articulation, the non-appearance of the cardiac complications, the tenacity with which it clings, the fact that the disease has no tendency to change its seat—all serve to present a distinct clinical picture which could not well be mistaken. Another point worthy of mention is that while the part is absolutely at rest the pain is by no means as severe as in acute articular rheumatism.

The treatment is very similar to that of acute articular rheumatism, consisting externally in the use of counter-irritants, and later in the course of the disease applications of electricity; internally in the use of the salicylates and alkalies. Absolute rest of the part must be enjoined.—*Univ. Med. Mag.*, November, 1888.

Schuchardt on Sarcoma of the Vagina in Childhood.—The author reports 2 cases, and adds that seven similar cases had been hitherto reported. The age of the girls varied between the second and fifth year; the tumor, usually grapelike in form, was congenital in only one case. The course was very malignant in all cases. S. related two recent cases which had come under observation or operation in Volkmann's clinic; one of these—a girl of seven years—died of a recurrence two months after the operation. The other case occurred in the patient presented, then five years old. She began to suffer in the spring of 1885; bean-shaped tumors projected from the vagina on coughing; in September of the same year, the tumor was excised together with a portion of the vaginal wall the size of a dime. Six and a half months later, the tumor reappeared, being about the size of a walnut; it was extirpated together with one half of the posterior vaginal wall; the remainder of the vaginal wall was drawn down and fastened to the perineum at the point where the skin changes into mucosa. The wound healed by first intention; since then the child had remained well. Both the excised tumors were papillary in character and proved to be round-celled sarcomata under the microscope. S. thought the papillary proliferation shown by the mucosa around the tumor indicated a disposition to the formation of sarcomata.—*Am. Jour. Obstetrics*, etc., Oct., 1888.

Minard (E. J. C.) on the Origin of the Menstrual Flow.—The authoress described a case of inversion of the uterus where a dark, healthy flow, but without epithelia, had come from the tubes, which were under direct observation. The uterus had during the whole epoch been congested and bright red, but at no time moist enough to stain a piece of paper rubbed over its surface. The tubes were dilated at their openings. Judging from the anatomical make-up of the womb and from various clinical facts, she was convinced that this was the natural order of things, and that, while epithelium and *débris* of decidual origin were washed away, no blood escaped from the uterine wall. Sometimes when, in doing Battey's operation, the surgeon failed to remove the tubes close up to the uterus, menstruation had continued although no ovaries remained.—*N. Y. Med. Jour.*, Oct. 27, 1888.

Grant on a Preputial Calculus.—The specimen was said to have been growing for twenty years, in a man, aged about 45, the subject of congenital phymosis; married; one child. The stone, encountered while performing circumcision, was embedded in the substance of the prepuce, near the corona glandis. It is round, flattened, with a convex and a flat surface, slightly reddish, ⅜ inch in diameter, and weighs 60 grains. There is a white enamel-

like nucleus, surrounded by several layers of brownish or reddish-brown hue. One layer is decidedly red. The appearance of the central portion suggests an origin from densely-inspissated smegma; the reddish color of the concentric outer layers is probably due to blood-pigment from hemorrhages, caused by the friction of the calculus. No special irritation or pain was caused.—*Australian Med. Jour.*, Sept. 15, 1888.

Dr. Schweinitz (G. E.) on an Anomalous Arrangement of the Right Crus of the Diaphragm.—The sternal portion of the diaphragm is occasionally wanting. Absence of other portions, with hernial protrusion of the abdominal contents into the thoracic cavity, are on record. A fleshy fasciculus has been seen passing from the border of the œsophagus to the œsophageal opening. Knox has described a *musculus hepatico-diaphragmaticus* which arose from the left side of the central tendon, and, after passing over the œsophagus to the right, divided into two slips, one of which went to the under surface of the liver, and becoming tendinous, joined the obliterated ductus venosus and umbilical vein; the other crossed to the right crus, and was lost in the peritoneum. (F. J. Shephard, M.D., "Reference Hand-book of Med. Sc.")

The following anomaly of the diaphragm was discovered during last winter. The subject was a middle-aged, white male. Opposite the first lumbar vertebra the right crus divided into two bundles, the inner and smaller of which passed diagonally across the bodies of the vertebral column, and was inserted into the notch of the cordiform tendon. This bundle, together with the outer fasciculi of the right crus, surrounded the œsophagus, the opening for which was consequently above, anterior, and to the *right* of the aortic orifice.

The left crus arose in its usual tendinous manner, passed upward to its insertion, and constituted the left boundary of an opening, the right half of which was formed by the anomalous fasciculus. Through this aperture the aorta passed. The opening for the vena cava was in its normal place. —*Univ. Med. Mag.*, Oct., 1886.

Pasteur on Pulmonary Gangrene Treated by Incision and Drainage.—The patient was a delicate-looking boy aged 7. His illness was insidious in the onset, but had developed rapidly. On the morning before admission he coughed up a quantity of bright blood, and his mother noticed that his breath had become very offensive. On admission (October 22d) ten days after the onset, he was febrile, with thickly coated tongue, quickened breathing. and gangrenous fœtor of breath. Over the right upper lobe were impaired resonance, weak tubular breath-sounds, and diminished voice-conduction. During the next three weeks cavity signs developed at the right apex, and the remainder of the right lung become pneumonic. Temperature ranged between 100° and 103.6°. He spat up daily from two to four ounces of stinking watery fluid, mostly saliva. Mr. Pollard operated on November 13th. The cavity was incised at the anterior extremity of the right second space, one inch from the sternum. Large quantities of gangrenous lung and putrid fluid were expelled through the wound. The cavity reached down to the sixth rib. A counter-opening was made in the sixth space, flanged tubes inserted, and a blue wool dressing applied. Next morning the child was much relieved, nearly free from cough, expectorating small quantities of frothy sputum almost free from odor, and practically free from pain, which had hitherto been a most distressing symptom. The cavity was washed out daily once or twice, as occasion required. At the end of a week the washings deposited a copious sediment of pus. The improvement, however, was not maintained. The temperature, pulse, and respirations remained high, fetor of breath reappeared on the tenth day, and the patient sank rapidly three days later. A huge cavity occupied the anterior third of the right lung. It was lined for the most part with a thin layer of granulation tissue. At the inner margin the necrotic process had invaded the pericardium, and set up acute pericarditis. The œsophagus was firmly adherent to the right bronchus, and a narrow sinus, about three-quarters of an inch long, led from a minute valvelike opening in the œsophagus to a small ragged opening in one of the main divisions of the right bronchus. There were no signs of tubercle or of caseating or suppurating bronchial glands. The gangrene was undoubtedly due to the passage from the œsophagus into the lung of some irritative material (probably decomposing food-stuffs) along the sinus above mentioned. Whether this sinus was the remains of a glandular abscess

or was caused by the passage of some pointed foreign body from the œsophagus, was doubtful. The limitation of the gangrene was the anterior region of the lung, and the implication of all the three lobes in a single cavity was worthy of notice. Pericarditis appeared to be a rare complication of pulmonary gangrene. The indications for surgical interference were sufficiently clear, namely, imperfect communication of gangrenous area with the bronchi, failure of expectant treatment, signs of a cavity in an accessible situation. The amount of repair which took place under unfavorable circumstances was very encouraging. An earlier operation might have saved the life of the patient.—*Br. Med. Jour.*, Oct. 20, 1888.

Steel (G.) on a Case of Excavated Malignant Tumor of the Lung.—The patient was a man of 45, whose disease began with an hemoptysis in May, 1887. An indefinite failure of heart followed, cough and expectoration not being present for several months. There was a great deal of pain in the right chest. There was fetid expectoration, large quantities of which were brought up at intervals, after the manner which we know to be suggestive of a cavity in the lung.

There was fulness of the upper part of the chest on the right side, combined with impaired movement of the same part. There was distention of the veins of the arm and neck, the subclavian being evidently more involved than the jugular. There was contraction of the right pupil. There was at first absolute dulness of the upper lobe of the right lung; obscure tympanitic resonance with cracked-pot sound on forcible percussion becoming subsequently developed in front. Behind, at a still later period, the occurrence of a similar diminution of dulness, the resonance, however, not possessing tympanitic quality. The dulness was limited to the affected side. Extension across the middle line was only noticed during the last few days of life, and then in very trifling amount.

The temperature only twice rose above the normal. One night it stood at 100.6°, and another night it was 100° F. Death took place March 7, 1888.

The autopsy revealed firm old pleuritic adhesions on both sides. The upper lobe of the right lung was voluminous, and its entire interior was hollowed out into an irregular cavity, which was filled with thick, greenish-yellow material which looked like pus, and was very foul-smelling. The walls of this cavity, about ¼ in. thick, were very irregular, and formed by a soft, grayish-white new growth.

Microscopic examination proved the new growth to be a lympho-sarcoma.—*Lancet*, Oct. 27, 1888.

Holliday (W. Z.) on a Case of Obstruction of the Bowel; One Thousand Watermelon Seeds Removed from the Anus.—"A few days ago I was called to see J. M——, negro. Inquiring as to the nature of his trouble, he stated that he was 'clogged with watermelon seeds.' He ate heartily of melons on Wednesday night, and since that night has had pains and straining in his bowels, with continuous desire to go to stool, but was unable to evacuate his bowels. Digital examination per anum confirms his diagnosis, and he is found very much 'clogged.' I can introduce my finger only through the sphincter; then the resistance of a solid mass of seeds prevents its further admittance. After getting a little opening by pulling away the seeds just inside the sphincter ani, I gave him a copious enema of tobacco-infusion. This soon had the desired effect, and he was *thoroughly relaxed*. After this I could easily remove the mass, which was very tightly impacted. The rectum, and perhaps part of the colon, was filled with this foreign material. It was with much difficulty that I reached in far enough to get it all; however, the contractions of the bowel would force the mass down as it was removed from below. Having gotten away all I could reach, and being quite sure most of it was out, I proceeded to count the seeds, and found there were just eight hundred and twenty. His wife now assures me that she had gotten away at least two hundred before I was summoned. So it is a fair estimate to say that the obstruction was originally a mass of a thousand watermelon seeds. He says his bowels are now easy, and that he feels very well. I ordered for him three ounces of castor-oil, to be taken at once, and left him. Returning next day he said his bowels acted three or four times from the oil. He is now all right."—*Med. Record*, Oct. 27, 1888.

A Peculiar Case of Worms.—Guemonprez narrates the case of a child of 3, who was surprised in the act of swallowing

a string of beads. Later 6 or 8 lumbricoid worms were evacuated after the administration of a dose of oil. On examination one of the parasites, about 9 inches in length, had passed through the perforation of one of the beads swallowed, and remained with the bead about its middle,

It is probable that the worm when small had crawled into this canal, got impacted, and there grown to its present size. It is a new demonstration of the habits of these worms to enter small orifices, as of ducts, "apparently for the purpose of scratching themselves" the author says.—*Jour. des Sci. Méd. de Lille.*, Sept. 7, 1888.

Hubbell (A. A.) on a Blow on the Ear with Peculiar Reflex Symptoms.—A boy of fifteen consulted me on September 23, 1888. On the previous day he and a playmate quarrelled, and the latter struck him on the left ear with his hand. The blow caused some pain and considerable impairment of hearing. Very soon afterwards it was noticed that there were peculiar convulsive movements of the lower jaw, by which it was quickly moved forwards, the mouth opening slightly at the same time. When I first saw him these movements were very frequent, only a few seconds intervening between each one. They resembled those of chorea, but were limited to the lower jaw. The patient said he was unconscious of their taking place, and could not control them by will.

On examining the injured ear I found that the drum-membrane was ruptured, was considerably red and tender, and a little blood was in the external auditory canal. The ticking of my watch, which should be heard five feet, was heard six inches.

No other symptoms were noticed. The lad was not robust, but appeared to be in good general health.

I cleansed the ear by syringing it gently with warm water, carefully dried it with absorbent cotton, inflated it with the air-bag, air and mucus escaping through the ruptured membrane, and applied to the latter powdered boracic acid.

The convulsive movements at once became less frequent and not as pronounced, and before leaving my office the interval between them was increased to several minutes.

The ear was treated for several days, by cleansing with warm water and applying boracic-acid powder, when the perforation was healed. The convulsive movements gradually diminished in frequency until the fifth or sixth day, after which they entirely ceased. The patient was discharged October 11th, with hearing for the watch increased to three feet, and with a prospect of its being fully recovered.

As in chorea, these movements did not take place when the patient was asleep.—*Buf. Med. and Surg. Jour.*, Nov., 1888.

Barr (G. W.) on the Signal Service and the Physician.—The effect of barometric pressure on various diseases has long been noticed, but the influence of combined conditions called "the weather" has not been worked out.

The author has been in the habit, for a long time, of watching the signal-service predictions, regulating his treatment of patients accordingly.

Should a patient have any fever with the convenient prefix "typho," a low barometer and an east wind will make him worse. The day before the beginning of a week's rain is a bad time to amputate a thigh or perform laparotomy. As the author says: "Only a country doctor, who is laying up 95 per cent. of his treasure in heaven on the endowment plan, can appreciate the value of knowing when a cold wave is coming down on his scantily-clothed, miserably housed sick."—*Med. and Surg. Reporter*, Nov. 3, 1888.

Two Cases of Combined Spina-Bifida, Hydrocephalus, and Club-Foot.—The first case is described by Bonnefoi[1] and was a female child born Nov. 20, 1887. It was the fifth child of a woman of 34 who, during gestation, in the fourth month was much frightened at sea and in the fifth month received a slight blow upon the abdomen. On admission to the hospital Nov. 24, 1887, the child was found to have in the sacro-lumbar region of the back an ovoid tumor 2¼ in. long by 1½ in. wide, which extended from the eleventh dorsal vertebra to the ¾ in. above the coccyx.

The cranium was flattened transversely, elongated antero-posteriorly. The frontal bones were separated from each other by as much as ¾ in. even down to the root of the nose; the anterior and posterior fontanelles were large fluctuating patches. Both feet were in a position of equino-varus, the deformity being more marked on the left side. There was complete paralysis of

[1] *Marseille Méd.*, Jan. 30, 1888.

the lower extremities. The child died Nov. 29th. An autopsy was held and the author narrates the pathological findings in detail.

The second case is reported[1] by Mr. James R. Buchanan of Glasgow. When first seen the child was a few hours old, the mother having been attended by a midwife. In the lumbar region the child was the subject of a well-marked spina-bifida. Arrest of development had also occurred in the frontal bone, a deep sulcus indicating the absence of bone leading from the supraorbital ridge to the anterior fontanelle, which was very large. The scrotum was represented by a very small loose pouch of smooth skin entirely empty, the testes being absent. The child was also the subject of talipes varus, or rather talipes equino-varus, in both feet, the latter being so much turned that the soles were uppermost. Hydrocephalus, as might have been expected, was very speedily developed, and the spinal bifida became a large rounded semi-translucent tumor. Operative procedure was obviously out of the question. The vegetative life was well maintained. The child took the breast greedily and the bowels acted regularly. The usual nervous symptoms soon presented themselves, and the child died in convulsions at the end of three months.

Puzey (C.) on Peculiar Results of Specific Sores.—Whilst I was making my round, a patient recently admitted with soft sores, which were healing, suddenly began to bleed. In the course of a very few minutes nearly half a pint of blood had been lost. I found that the bleeding proceeded from a small sore at the reflection of the prepuce; the penis was greatly swollen, and pressure on it forced blood out from this small opening. A director passed into the opening travelled right up to the root of the penis.

I at once slit the integument up for the whole length of the penis, and found exactly the same state of affairs as in the case recorded by Surgeon Caldwell.[2] The bleeding proceeded from a large branch of the dorsal artery of the penis, and was speedily arrested by a ligature, and the patient recovered without further trouble. —*Med. Press and Circ.*, Oct. 17, 1888.

Cutler (C. W.) on Gonorrhœal Infection of the Mouth.—Miss J. C., aged twenty one, presented herself for treatment at the New York Dispensary, July 18th, with the following history:

Ten days previously, while under the influence of liquor, she yielded to the unnatural desire of a sailor, and had taken his penis several times into her mouth. The next morning her mouth felt raw and dry, and the saliva had a horrible taste. On the second day little sores made their appearance about the lips, and the condition of the mouth remained about the same. On the third day the gums and tongue became swollen and painful, and on the fifth day the whole inside of the mouth was so intensely inflamed that she was unable to eat, and a whitish fluid, mixed with blood, having a nasty odor and taste, was secreted. This continued until the pain and inability to eat compelled her to seek medical advice at the dispensary. On examination, the lips were found cracked and covered with herpes in all stages of development. The mucous membrane of the lips and cheeks was thickened, reddened, denuded of epithelium in places, and, in small areas, covered with a false membrane, which was easily detached, leaving an excoriated surface.

The gums were swollen and retracted from the teeth, bleeding readily upon pressure. The tongue was swollen, very tender on touch and pressure, and could be but slightly protruded, and then only with pain and effort. The surface was red and glazed in appearance, with small superficial ulcers here and there, secreting a thick yellowish pus. The soft palate and anterior pillar of the fauces presented an inflamed appearance, but beyond the parts seemed to be in a normal condition. The breath was extremely offensive, although there was but little salivation.

The secretion from the mouth consisted principally of mucus, pus-cells, and epithelium, with presence of large numbers of bacteria. The false membrane contained micro-organism, resembling the gonococcus, but their identity was not fully established.

The sailor freely admitted that he had been suffering from a severe attack of gonorrhœa, and, not wishing to infect the girl, had entreated her to comply with his unnatural demands. She had yielded to his wishes, and become affected with a purulent stomatitis, probably gonorrhœal in character.

[1] *Br. Med. Jour.*, Oct. 20, 1888.
[2] See MEDICAL ANALECTIC, 1888, p. 517.

The symptoms were greatly relieved with the local application of glycerin and bismuth subnitrate, together with a mouth-wash of chlorate of potassium, but the patient disappeared from under observation before the cure was complete.—*N. Y. Med. Jour.*, Nov. 10, 1888.

THERAPEUTICS.

Cook (G. J.) on Absorption of Water by the Colon and its Therapeutic Uses.—In the autumn of the year 1882, while using large injections of hot water to remove a fæcal impaction located in the ascending colon, my attention was called to the rapid absorbing powers of the colon, and also the effect as a diuretic of water thus introduced in large quantities into the circulation.

This patient, to relieve intense pain, excited by the hard fæcal mass, had taken freely of morphia, and was thoroughly under its influence when I first saw him, a good condition in which to begin the treatment which I proposed, viz., the injection of water to soften the obstruction.

I threw into the colon about a gallon of water at a temperature of 115° F., and instructed the patient to retain it as long as possible. The next morning when I called, the patient in alarm informed me that the water had not yet passed away, and during the night he had had great trouble with his bladder, having to relieve it every hour. The quantity of urine passed during the night was almost equal to the water injected the evening betore. The hot water had also the effect of relaxing the colon and relieving pain, he having no occasion to take more morphia during the night.

Having to repeat the injection several times before the obstruction was removed, I closely observed the results. Each time before repeating the injection, I gave a full dose of morphia to quiet peristalsis, and with this preparation the colon retained the water without pain or inconvenience to the patient. It was rapidly absorbed, and within eight or ten hours from three to five pints of urine would be passed, varying in proportion to the quantity of water used. The skin was moist, but no diaphoresis occurred.

Since that time I have had occasion very many times in my practice to use large injections of water in the colon for various diseased conditions, and have had abundant opportunity for observing a repetition of the facts stated in connection with the first case, in regard to the rapid absorption of a large quantity of water by the colon, and its immediate effect as a diuretic.

In these cases the colon was frequently in an irritable condition, but with the aid of morphia the peristalsis could always be controlled and the intestine placed at rest when it was desirable to have the water retained. I have injected water into perfectly healthy colons to observe what quantity could be held without the use of morphia to quiet peristalsis, but never succeeded in having a quantity kept and absorbed that would materially affect the quantity of urine.

Subjects of chronic constipation, with atony of the colon, may retain a large quantity of water without morphia. In these the colon is already in a condition similar to a healthy one under the influence of morphia.

When we wish to place the colon at rest to retain and absorb water, it is best to give the morphia a half hour or an hour before injecting the water, though if the colon is very irritable it may require several doses, given at intervals during the preceding six or twelve hours. The injection should be made directly into the colon, and not allowed to flow through the rectum by the use of the ordinary syringe. The best instrument for the purpose is a Wales' rectal bougie, introduced until the end rests in the sigmoid flexure, then with a syringe attached to the outer end, the colon can be filled without distending the rectum. The water should be made to flow very slowly; a fountain syringe is the best for the purpose.

The temperature that I have found most agreeable is from 110° to 115° F. The desirable position for the patient is on the back with the pelvis raised slightly. This position enables you, by percussion, to trace the water as it fills the colon, to tell when it reaches the cæcum, and the amount of distention. If there is no obstruction the water will flow freely around the colon, which should be only moderately distended; usually from three to five pints can be used at an injection.

The normal colon is slow to respond to excitants, compared with the rectum, the latter being much the more sensitive part of the large intestine, having a nerve sup-

ply direct from the spinal cord. When the healthy rectum is distended, it responds quickly and expels its contents, and this excitation will be transmitted to the colon and cause it to act more promptly. But when the normal colon alone is distended by injection, it requires from fifteen to twenty minutes for peristalsis to be excited. This is the special reason for throwing the water directly into the colon when we want it retained.

After free diuresis is caused in this way in a healthy person, I have examined the urine to determine if the solids were increased during the twenty-four hours, but never found any increase in their amount, and reason would not indicate that there should be an increase in an individual perfectly healthy. Diluting the blood with an excess of water and increasing the blood pressure should not increase the waste products in it.

The introduction of a large quantity of water in this way into the circulation provides us with a certain, non-irritating, and non-stimulating diuretic, a therapeutic agent which we are often in great need of to wash out the kidneys and drain from the blood the poisonous excretions. The quantity of water which can be introduced at once through the colon into the system, is much greater than can be taken in any other way. Absorption is prompt and rapid, the blood is diluted with pure water, and the blood pressure greatly increased within a short time, conditions favoring the flow of water out through the kidneys.

In acute febrile conditions, when the water is being rapidly taken from the system by the cutaneous and pulmonary evaporation, and the renal blood pressure is greatly lessened by the attraction of blood to the surface of the body, the kidneys often become inactive. In such cases free diuresis can be excited promptly by the introduction of water through the colon.

In cases of continued fever, when the tissues are being desiccated by the free evaporation, and emaciation is progressing rapidly under the influence of increased temperature, and only a small quantity of fluid can be taken by the stomach, great good can be done by conducting water freely through the colon into the circulation. The blood-vessels are filled and the tissues again supplied with water, which will induce a free action of the kidneys, and also other glands of the body, and wash out the waste material, the result of rapid tissue change which takes place under a high temperature.

The most important therapeutic action from water used in the manner described, is in diseases of the kidneys, and in these it can surely be made of great use. In renal hyperæmia, when we scarcely dare to give a diuretic that is irritating or stimulating, and all diruetics, except pure water, are more or less irritating or stimulating to the kidneys, we can use pure water freely. It is safe and will filter through the Malpighian tufts, wash from the epithelial cells of the convoluted tubes the solids secreted there, and deplete the kidneys.

In acute and chronic parenchymatous nephritis, when the tubules are clogged with epithelial or waxy casts, the large quantity of water which can be made to flow through the kidneys in a short time by this method, will wash out the casts, clear the kidneys, and make them much more useful. The water filters through the glomerules above the cast, and will readily displace it.

Water, when absorbed through the colon, enters the portal circulation, and, to reach the general circulation, has to pass through the hepatic capillary system. What effect the passage of a large quantity of water in this way would have on the liver, I cannot say, but would suggest that the effect might be beneficial in acute and chronic congestions of this organ.—*Weekly Med. Rev.*, Oct. 27, 1888.

Humphrey (H. S.) on Carbo-Oxygen in Consumption and other Forms of Wasting Disease.—Fully appreciating the obstacles to the digestion and absorption of oil in diseases where it is most needed, the author proposes administration of oil and oxygen by the bowel and thus describes his method.

Having selected a proper subject for treatment, I prepare fresh oxygen-gas, which I keep in a zinc or galvanized-iron reservoir over water. I fill a three-gallon rubber-bag, of which a number should be kept on hand. I next connect the bag with my injector (a common rubber bulb-spring makes a good one), connect this with the wash-bottle, fill the bottle two thirds full of pure water, attach the long rubber pipe to the exit tube, to which connect the female tube of a common syringe. Every thing must be absolutely clean and

air-tight; these are the essentials for using the gas. As to the carbon, I use a long, open-mouthed, glass syringe, modelled after Professor Thomas' artificial leech for dry-cupping the womb, holding three to four ounces. Having my emulsion ready, I place my patient upon his back with the nates resting well forward over the edge of the operating-chair; filling the syringe by suction, I gently pass it beyond the internal sphincter, when I slowly express the contents, one, two, or three ounces, as I desire, into the bowel; then directing the patient to contract the sphincter, I withdraw the instrument, allowing my patient to rest twenty to thirty minutes. I next introduce the gas-pipe, having first contracted the bulb once or twice to expel the air from the tubes. I slowly inject from one to six quarts (vol.), depending on the capacity of the abdomen, the condition of stomach, liver, kidneys, etc., for if there is much tenderness of any of these organs, the pressure of the gas will cause pain; no definite rule can be given as to quantity. I watch my patient, and when I notice marked fulness of the abdomen, with restlessness of patient, I stop. The treatment may be given twice daily, but I find once a day quite sufficient in most cases.

The bowel should be emptied and treatment given about three hours after the breakfast-hour. In conjunction with this treatment I use small doses of ferri sulph. exsiccat. say half a grain at ten and four o'clock daily, largely diluted in pure water, say eight ounces; besides, I encourage my patients to drink freely of water and bathe often. As we increase the quantity of iron in the blood, we increase its capacity to utilize oxygen, and it should be remembered that in every case of anæmia, where a chalybeate course brings color to the pallid cheek, that it is oxygen and not iron that reddens the blood.

As soon as possible I encourage my patient to eat light hydro-carbonaceous food, followed, as soon as admissible, by some egg-albumen, chicken, fish, etc. Meanwhile I put him upon the inhalation of dilute oxygen-gas, one part oxygen to four of pure air, drawn through water to the reservoir. From the reservoir I have this mixed gas drawn through an inhaling bottle half filled with oil of turpentine; this adds ozone to ordinary oxygen, and renders it surprisingly active. Care should be used in giving this ozonized gas, as, if there is destruction of bronchial epithelium, annoying irritation is set up, with aggravating cough; the inhalations should be given slowly, free respirations of air allowed meanwhile. The first effect of the gas so used is that of a sedative; the pulse becomes slower and fuller, followed in an hour or so by a feeling of greater strength and a desire to get about; there is no excitement produced, but after an hour or so a general sense of well-being becomes manifest. I believe I have herewith given the easiest and safest method for ozonizing oxygen, and so used, with nit. monoxide, it should be a successful remedy for asthma and hay-fever.—*Med. Record*, Nov. 10, 1888.

Camman (D. M.). Observations on the Use of Terebene.—Thirteen cases, treated by the author, were of chronic bronchitis, most with more or less extensive pleuritic adhesions. Three were acute bronchitis, ten emphysema, two asthma and bronchitis, ten phthisis, one pleurisy, and one of the third stage of pleuro-pneumonia. Two of these, both cases of acute bronchitis, were cured, one in four and the other in eleven days. Thirty-three cases were improved, most of them markedly, but a few only to a slight degree. Five were unimproved, two of the patients being obliged to discontinue the drug after two or three days, as it produced vomiting. The shortest time the treatment was continued in any case was four days, the longest time six months. The average length of treatment was a little over twenty-six days. Most of the patients took fifteen minims and some as much as half a drachm in a mucilaginous mixture four times daily. In all except three the cough was improved, becoming softer and less frequent. In twenty-six the quantity of the expectoration was lessened, in four it was unchanged, and in two it was increased. The latter were under treatment only one week, and it was found in some of the other cases that the expectoration was increased for the first few days and afterward diminished. In seventeen cases the expectoration became thinner and more watery; in six it was no thinner. In the other cases no note was kept in regard to this point. In those troubled with dyspnœa it was diminished in thirteen and undiminished in eight. The patients noticed an increase in the urine in nine cases; no increase was noticed in fifteen. In many of the cases the appetite

improved. In two cases the terebene caused vomiting, in two nausea, in one dizziness and nausea, and in two dizziness. These symptoms usually disappeared when the dose was reduced. It is beneficial in affections of the bronchial mucous membrane, both acute and chronic. It relieves the dyspnœa of emphysema, it is readily borne by the stomach, and it seems to have a resolvent action on pleuritic adhesions.—*N. Y. Med. Jour.*, Nov. 10, 1888.

Monobromide of Camphor in Spasmodic Nervous Affections.—Dr. John Edgar reports very favorably upon the usefulness of the monobromide of camphor in paralysis agitans and chorea. In a case of the former complaint much improvement ensued, in the latter a rather speedy cure. He gives the drug in pill form ; gr. iii, with gr. ss., ext. belladonna and ext. gentian q.s., t.i.d.

Mr. John Stevenson reports a case of epilepsy cured by the same drug. A man of 42 complained of having suffered for some considerable time from "fits," occurring as frequently as six times a week, the severity of which compelled him to give up his employment. Dr. Black prescribed 10 gr. doses of monobromide of camphor with belladonna in pill, and as the fits instantly ceased, this was continued to the end of the fourth week. The reporter saw the patient frequently for three years, and he asserted then that from the moment he began the pills he never had a single fit.—*Med. Press*, Oct., 1888.

Claremont (C. C.) on Antipyrin Rashes.—The two cases described occurred during the course of enteric fever. In the first, ten doses of 15 grains had been given in the course of ten days when the eruption appeared. It came out simultaneously on the abdomen, thorax, back, and limbs in the form of papules, darker, larger, and more solid than the spots of enteric fever. There was a considerable resemblance to measles. The eruption developed into enormous erythematous blotches, with much infiltration, their vivid red color being removed by pressure, leaving faint yellow pigmentary discoloration. The rash began to subside on the sixth day, and on the tenth day was only represented by faint coppery maculæ, resembling an old syphilitic eruption. Antipyrin was omitted on the appearance of the eruption. In the second case the drug had been given in 15-grain doses, generally twice a day, and omitted altogether for four days. The enteric exanthem had been unusually copious. On the twentieth day of the exhibition of the drug there was a papular erythematous rash on the extensor surfaces of the arms; this spread to the flexor surfaces, and also affected the calves. The antipyrin was omitted. On the fourth day the rash was almost gone, leaving only slight redness and desquamation. The patient had a relapse of fever, and was again treated with antipyrin without suffering from a return of the eruption. Dr. Claremont stated that antipyrin rash generally was of the papulo-erythematous type, and began on the extensor surfaces of the elbows and knees. It had been described in one case as commencing on the face, and in another as extending to the mucous membranes. Once vesicles had been present. Its most constant characters were its bilateral symmetry and its duration of about five days, irrespective of the continuance or withdrawal of the drug. The entire absence of subjective symptoms was exceptional. A scarlatiniform rash had been mentioned, but Dr. Claremont had been unable to ascertain that it was more than a transient flushing, such as is produced by belladonna.—*Br. Med. Jour.*, Oct. 27, 1888.

MISCELLANY.

Meredith (W. A.) on Some Points Affecting the Mortality of Abdominal Section.—The purpose of the paper was to draw attention to certain points affecting the present death-rate after abdominal section, and with this view operations for ovarian growths were chosen as being to some extent representative of the entire subject under consideration. As a basis for the inquiry, the results of the author's own work in this connection, amounting to 126 operations, were examined with regard to the chief causes influencing the mortality, special reference being made to the ten deaths which occurred in the series of 104 completed ovariotomies. All the operations were performed with strict antiseptic precautions, including the use of the carbolized spray. He was now less inclined than formerly to look upon the latter as an absolute essential to the safeguards of antiseptic abdominal surgery, but he still considered it valuable as the most convenient and effectual means of antiseptic irrigation

at our disposal when dealing with the peritoneal cavity. Both ovaries were removed in seventeen cases, two of which terminated fatally, but in neither instance was the result in any way attributable to the removal of the second ovary. Complete enucleation was performed in five cases, all successful, the resulting rent in the broad ligament being closed by means of a continuous silk suture. He advocated the use of the drainage tube in all cases of ruptured or inflamed cysts, in any case where irritating or septic fluid had escaped into the peritoneum, in all operations complicated by serious injury to bowel or urinary bladder, in every instance where washing out had been resorted to, and in all cases of severe operation in middle-aged or elderly women. For washing out the peritoneum, where necessary, he advocated the use of plain, recently boiled water, cooled as required by the addition of a saturated solution of boric acid. Discussing the mortality, he was inclined to believe that in large series of cases the average death-rate would never be less than 5 or 6 per cent. Of the ten deaths in his series two were from septicæmia, one from intestinal obstruction, one from hemorrhage, one from dysenteric diarrhœa, two from chest complications, and three from exhaustion ; three of these deaths were from preventable causes. Twelve successful operations for the removal of diseased uterine appendages were next reviewed. In seven patients in whom both appendages were removed, complete arrest of menstruation followed. He had found that in cases of chronic ovarian mischief about 90 per cent. were the subject of obstinate constipation, and in them tonic purgative treatment, by lessening pelvic congestion and preventing the formation of scybala, was followed by marked relief of symptoms. Included in a series of ten exploratory operations were two incomplete ovariotomies. Both patients had been tapped, and the death of one was directly due to the difficulties encountered in the attempt to separate universal adhesions which had resulted from this treatment. In conclusion, it was shown that the increased success of abdominal section for ovarian disease during the past ten years was chiefly attributable to the diminution in the number of deaths from septicæmia. For purposes of comparison he took three successive groups of operations, which represented three separate periods during the last twelve years, and gave their average death-rate from septicæmia alone. In 100 consecutive cases taken from Sir Spencer Wells' work, when the clamp was used and before the employment of antiseptics, the mortality was ten, or one to every ten patients. In 150 cases recorded by Mr. Thornton in the sixty-fourth volume of the "Medical and Chirurgical Transactions," which were treated antiseptically and with intra-peritoneal ligature of the pedicle, there were five deaths, or one to every thirty patients. In his own series of 104 cases there were two deaths, or one to every fifty-two patients. The chief factors which had contributed to this increased success, he thought, were as follows: (1) The general adoption of the intra-peritoneal treatment of the ovarian pedicle ; (2) the application of the antiseptic system to abdominal surgery ; (3) the gradual abandonment of the practice of tapping abdominal cysts ; (4) the increase in our knowledge respecting the proper use and management of the drainage tube ; (5) the recent introduction of the plan of freely washing out the peritoneal cavity in cases complicated by the extravasation of blood or other fiuid.—*Lancet*, Oct. 27, 1888.

Hewitt (G.) On the Severe Vomiting of Pregnancy.—The author discusses particularly the state of the uterus in association with severe gravid vomiting, analyzing, in a series of tables, reports of over 50 cases, where changes in the uterus were noted. In 5 cases there was inflammation of walls of lining of gravid uterus. In 2 inflammatory cellulitic tumors, uterus being also anteverted or anteflexed. In 11 cases, uterus retroverted or flexed, impaction or incarceration being a marked feature. In 30, gravid uterus was anteflexed or anteverted : in 17 of the 30 cases it was also impacted or incarcerated in the pelvis : in 6 cases there was "detention" of the uterus in the pelvis. In 12 cases there was induration or thickening of the cervix uteri, and in most of those 12 cases uterus was also anteflexed.

The cases analyzed exhibited the remarkable frequency with which impaction, incarceration, or detention of the gravid retroflexed or anteflexed uterus is associated with severe sickness ; also the importance of thickening and induration of the cervix. Incarceration or impaction of gravid retroflexed or retroverted uterus is well-known and admitted as a serious condition, but

the facts recorded show that anteflexion also is liable to be attended and associated with very marked impaction of the gravid uterus in the pelvis; and further, that this association of anteflexion and impaction is liable to be associated with severe vomiting in pregnancy. The impaction was in some of the cases so severe that it could not be released.

The importance of the impaction as a factor is shown in the results of treatment. Nine of the 11 retroflexions were at once relieved by replacing the uterus. In 11 of the anteflexion-impaction cases when impaction was not or could not be removed death took place in three instances. In 6 of the 11 cases abortion was induced, with 2 deaths. In 2 of the 11 natural abortion, 1 died. In 17 anteflexion-impaction cases, 6 cases were effectually treated—by manual effort in 4, by rest, etc. in 2, cure in all 6 cases. In 6 "detention" cases manipulative reduction in 4 cases, in 2 natural elevation, cure in all 6.—*Med. Press and Circ.*, Oct. 24, 1888.

Schucking on Ligature of the Uterus for Displacements. — The method of procedure followed by Schucking is thus sketched out by the Berlin correspondent of the *Medical Press* (Oct. 24, 1888). After thorough disinfection of the vagina and endometrium the patient is placed in the lithotomy position of English surgeons, the upper part of the body being placed low (hips raised). After emptying the bladder and the introduction of a Sims speculum, the anterior lip of the cervix is seized with forceps, and the fundus uteri is brought forwards by means of a uterine sound. For the purpose of passing the needle he uses a specially constructed instrument. The needle is then passed to the fundus uteri, and the uterus is drawn strongly down by the right hand, that holds both the forceps and needle-holder, in such a way that the os points to the left and the fundus to the right side. By gentle side to side movements he then tries to find the point of the uterus, on which the instrument within is pressing, an assistant at the same time drawing the bladder to the left. The needle is then passed through into the vagina. The operation is not difficult of performance in the case of women who have borne children, and in whom the pubic arch is rather flat, but where the uterus is enlarged, as it often is, and the parts are narrow or rigid, it may not be at all easy. The ligature is then seized with a curved hook, drawn a little forwards, and cut off from the needle. The two ends are then tied. At the close an iodoform bougie is placed in the vagina and bladder. Ice is placed on the abdomen for twenty-four hours, and the thighs are flexed in order to reduce the tension on the suture. Until the suture is removed an iodoform bougie is placed in the vagina every second or third day. Some bladder troubles were remarked after the operation in nearly all the cases of retroflexion, but on the other hand, bladder troubles present beforehand in cases of procidentia, ceased after the operation. The sutures were removed in from six days to three weeks, once in six days, in eleven cases of retroflexion from the ninth to the fourteenth day.

Three Cases of Loss of the Penis. —In the *Br. Med. Jour.* for Oct. 22, 1888, Dr. Lloyd Owen reported the history of a patient who had completely lost his penis for twenty-seven years. The testes were normal. The injury occurred in China, during an engagement, by falling on an iron spike. The organ was severely lacerated and contused, and was afterwards destroyed by sloughing. For the last few years he had suffered from stricture of the urethra. Seven months ago he had extravasation of urine, and was at once treated with free incisions and carbolized baths. The urethral orifice appeared as a small depression on the surface.

Dr. Ward Cousins told of a patient who had lost half of his penis in China twenty years ago by crushing accident. The left testicle had been torn out by a machine injury ten years since at the Royal Naval Yard, Portsmouth. The patient had been recently under treatment for traumatic stricture and extravasation of urine.

Mr. Rundle told of a patient the whole of whose penis had sloughed off. A man, aged 68, had suffered from stricture for thirty years. Unsuccessful attempts to pass a catheter had been made a week before admission to the hospital, and the penis and scrotum were in a gangrenous condition from extravasation. Free incisions were made, and frequent warm antiseptic baths ordered. A fortnight afterwards the whole penis separated. Subsequently a catheter was introduced from the perineum. The wound over the pubes had now healed, and the urethral orifice was obliterated.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of

CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital; CONDICT W. CUTLER, M.D., Instructor in Diseases of the Skin, Post-Graduate Medical School, New York; JOHN S. HAWLEY, M.D., Attending Gynæcologist, New York Hospital, Out-Patient Department; FREDERICK PETERSON, M.D., Lecturer on Nervous Diseases at the New York Polyclinic.

VOL. V., NO. 47. November 22, 1888. WHOLE NO. 95.

CONTENTS.

	PAGE
Leading Article	557
Occasional Report on Diseases of the Heart	560
Miscellany	562

LEADING ARTICLE.

Alexander's Operation.—The history of this operation dates from 1840, when Alquié of Montpellier presented to the Academy of Medicine in Paris a memoir entitled "The Shortening of the Round Ligaments as a Remedy for Displacements of the Uterus." Alquié was very unpopular at this time, and the committee of the Academy to whom the memoir had been referred pronounced the procedure impracticable. Alquié never performed the operation upon a living woman. Afterwards, Aran, Deneffe, and Schultze, in their writings, referred to the idea of shortening the round ligaments for uterine displacements. Then in 1885, Rivington, of London, in a note published in the *British Medical Journal* of Feb. 18th, related how, fifteen years before, he had a case of strangulated hernia in a woman who had also a procidentia uteri. In opening the inguinal ring, Rivington took occasion to draw out the round ligaments, and found that by them the uterus could be sustained. Thereon he bases his claim to priority in regard to the procedure.

But for practical application, the idea had met no favor until in December, 1881, William Alexander, of Liverpool, shortened the round ligaments in a case of retroversion. He described his operation and reported this case in the *Medical Times and Gazette*, April, 1888. The crowds of working-women who came to his workhouse clinic had brought to Alexander's mind the conception of suspending the uterus by those structures hitherto regarded as useless—the round ligaments. Alexander claims "absolute originality." He never heard of Alquié or Aran until his work caused writers to refer to them. Adams, Demonstrator of Anatomy in the University of Glasgow for eighteen months previous to Alexander's first case, had been publicly demonstrating to his students the operation upon the cadaver. Adams published his first article in June, 1882. The priority was claimed by each, but the world has practically settled the question in favor of the man who first shortened the round ligaments on a living woman.

The operation demands a careful review of the anatomy and physiology of the uterine supports, the mechanics of the pelvic organs, and the conditions of the pelvic circulation. The round ligaments naturally claim especial attention. They cannot be better described than as by Dr. Rainey, quoted by Mr. Adams from the "Transactions of the Royal Society" for 1882. "The so-called round ligaments of the uterus may be said to arise by three fasciculi of tendinous fibres: the inner, from the tendon of the internal oblique and the transversalis, is near to the symphysis pubis; the middle fasciculus arises from the superior column of the external ring near to its upper part; and the external fasciculus from the inferior column of the ring, just above Gimbernat's ligament. From these attachments the fibres pass backward and outward, soon becoming fleshy in the inguinal canal. They there unite into a rounded cord, which crosses in front of the spermatic artery. It then gets between the two layers of the peritoneum, forming the broad ligament, along which it passes backward, downward, and inward to the anterior and superior part of the uterus.

Here its fibres may be said to be inserted. After passing between the layers of the broad ligament to about the distance of an inch and a half from its superior part, the round ligament degenerates into fasciculi of granular fibres, mixed with long threads of fibro-cellular tissue. Besides muscular fibres, the round ligaments contain numerous vessels, nerves, and absorbents. The fibro-cellular tissue is in considerable quantity, so great, indeed, as to lead the superficial observer to overlook the presence of muscular fibres. It would be supposed that the muscular structure of the ligament would render it friable, but it has been found capable of considerable traction, drawing the fundus up to the external ring with no perceptible laceration. The tenacity is undoubtedly due to the fibro-cellular constituents." Beunier (*L'Union Méd.*, 1885, xl.), Wright, and Polk (*N. Y. Med. Rec.*, July 3, 1886), have made trials of the strength of the round ligaments, which prove that its resistance is relatively considerable, more than is even functionally demanded of it. The function of the round ligaments is somewhat uncertain; their importance is probably not very great. In the human being "the function of the round ligament is generally agreed to be to prevent the fundus from being pressed too much backward, to aid in preventing the entire body from being prolapsed and resting with undue weight upon the rectum, and to facilitate the process of parturition by fixing and maintaining the uterus in due relation to the pelvis during the pains of labor."

Alexander, in the numerous articles that he has published on his operation, has devoted a great deal of study to the subjects of uterine support, the mechanism of the occurrence of displacements, and the philosophy of their correction. As to the comparative advantages to be obtained by the shortening of one round ligament, or both, Alexander and Doléris do not agree. Alexander admits that, so far as purposes of strength are concerned, one round ligament would be sufficient, but that the force of the intestines falling behind one broad ligament, and in front of the other, will act disadvantageously: "one half tends to beat the womb down, and the other half to support it." Doléris advocates shortening one round ligament instead of both, because of the action of the bladder. Where both ligaments are shortened he shows that the bladder cannot rise when distended, but must extend downward or laterally, and that it is impossible that this shall not finish by exercising a traction upon the neck of the uterus, tending to elongate the round ligaments and to favor re-descent.

INDICATIONS.—The round ligaments may be shortened for cases of:

1. Retroversion and retroflexion, which may be reduced upon the sound, and in which other means of relief have failed.
2. Prolapsus uteri, especially of the third degree.
3. Anterior displacements of an extreme degree.
4. Ovarian prolapse. Suggested as a suitable indication by some authors, not entirely on theoretical grounds.

The contra-indications are principally the existence of adhesions, where the uterus cannot be reduced upon the sound. Moreover, cases where a pessary corrects the displacement and relieves the symptoms cannot be considered as requiring this operation.

There are certain accessory operations that are considered advisable by all authorities. Where indicated, the perineum should be restored, the cervix repaired, and a cystocele or rectocele remedied. These operations should precede the shortening of the round ligaments.

The steps of the operation are not studied from Alexander's articles. In the earlier days of the procedure, it was not infrequently reported that the round ligament could not be found. Alexander says: "The chief point to insure success in finding the ligament is to expose well, in the first instance, the glistening tendinous pillars of the ring and its contents." In women of advanced age the ligaments may be atrophied; in some others they may be very small and brittle, but it is asserted by the best authorities upon the anatomy that they are never absent.

It is considered best to support the uterus by vaginal tampon or by pessary from the moment of the bringing up of the fundus to the pubes. In case of a flexion, the operator introduces an intra-uterine stem to be left in place some time. The after-treatment of the case has much to do with its ultimate success. The patient must be kept in bed until the ligaments have united firmly to the pillar of the ring. This, Alexander states, will re-

quire about three weeks. Until the connective-tissue surroundings have contracted and consolidated, and the uterus has adapted itself to its new position, it is best to retain the pessary. This period, sometimes called the *period of involution*, is at least a year.

Alexander classes the results of the operation of shortening the round ligaments as "anatomical successes," and "therapeutic successes." Some cases will be both or neither, others will be one or the other alone. Several cases have been reported where a subsequent laparotomy has shown the position of the uterus. Dr. Polk had occasion, in one of his cases, to remove a large fibroid ten months after the ligaments were shortened. He found the uterus held up to the pubes in good position.

Dr. Abbe (*N. Y. Med. Jour.*, March 6, 1888) speaks of a case where, six months after the ligaments were shortened, he opened the abdomen to remove the ovaries, and found the uterus as he had placed it.

Several anatomical failures have been frankly recorded. Some of these cases were probably due to the operator's unfamiliarity with the procedure; and others possibly by the elongation of the ligaments.

There is little favor shown the operation in Germany. Winckel thinks that in time there ought to be trouble from the anteversion. Smith (*Can. Med. Rec.*, 1886–7, xv.) holds that the good results come from the involution set up and the long rest in bed. He believes that if the round ligaments will not keep the uterus in pregnancy from rising, they will not keep it from falling.

Alexander classified his cases for the Ninth International Medical Congress (*Trans. Gyn. Soc.*, 1887). He has done the operation the largest number of times of any operator. Since December, 1881, he has shortened the round ligaments in 84 cases. Of these 84, 1 died of pyæmia and peritonitis; 4 others were too recent to be included in the statistics. Thirty-five were private cases; 31 of these were for retroflexion and prolapse. Of these 31, 20 were anatomical and therapeutic successes, 5 were anatomical successes, 2 were anatomical successes and therapeutic failures, and 4 failed in both respects. Of the 4 failures, in 1 the recoil of the uterus drew the ligaments back before union had taken place; in another, non-union resulted from unsuccessful drainage. The hospital cases were 27 for retroflexion and 9 for prolapse. All of these were entirely successful as far as could be ascertained. In 12 cases the perineum was closed; 2 cases of retroflexion became subsequently pregnant. Alexander's cases are by far the most instructive for study. The enthusiasm of the originator has led him to note many points that his followers have overlooked.

J. H. Kellogg (*Annals of Gyn.*, Boston, Dec., 1887) has published 25 cases of the operation. Gardner (*Austr. Med. Jour.*, Oct. 15, 1886) has reported 20 cases; Imlach (*Centralbl. f. Gyn.*, Nov., 1886), 36 cases; Polk (*N. Y. Med. Rec.*, July 3, 1886) has reported 15 operations; Lee (*N. Y. Med. Jour.*, March 3, 1888) has done the operation 19 times. Reid, of Glasgow (*Trans. Ninth International Medical Congress*, 1887), has operated 13 times. From all parts of this country and England, reports of cases, as the *Index Medicus* will show, have been numerous. The surgeons referred to have, however, presented the longest series.

Results should not be reported too soon; the processes of involution set in motion by the operation are slow ones, and time is required for their perfect work.

A thoughtful study of the cases by competent operators will to the unprejudiced mind carry the conviction that shortening the round ligaments is a desirable procedure in certain well-selected cases; but that the range of the operation is not so wide as the first enthusiasm promised. A skilful diagnosis must rule out, in posterior displacements, those cases where adhesions exist; and in prolapse, the holding of the fundus to the pubes is not the whole remedy. To be convinced of this, one has but to see the cervix, hopelessly loosed from its sacral moorings, again appearing at the vulva, although the fundus is suspended high. It is always of great importance to restore the supports from below, and when the utero-sacral ligaments are much lengthened, a pessary will have to be worn perhaps for years.

Doléris (*Nouvelles Archives d' Obstetrique et de Gynécologie*, No. 1, Jan., 1886, *et seq.*) has so strongly urged the importance of the accessory operations, that he has drawn upon himself in certain quarters the reproach of making the shortening of the round ligaments a mere adjunct to other operations upon the perineum and vagina.

Perhaps further experience will show that in the reproach of this generation lies the truth for the next.

ELIZABETH STOW BROWN.

OCCASIONAL REPORT ON DISEASES OF THE HEART.

BY WALTER VOUGHT, M.D.

The Cardiac Changes in Chronic Bright's Disease.—At the last meeting of the Association of American Physicians, Dr. A. L. Loomis, of New York, read a paper with the above title, giving the results of his own observations on this subject, as follows:

"My clinical and pathological studies during the past five years, however, have forced upon me the conviction that simple cardiac hypertrophy is not found in so large a proportion of cases of chronic Bright's disease in this country as are reported by English and Continental observers; and that when it is associated with extensive changes in the glandular structure of the kidney it is due to the primary arterial rather than to the renal disease. The most constant cardiac changes which I have met with in chronic Bright's disease are dilatation of the heart cavities and degeneration of the heart walls. In most instances where I have found tubular and interstitial changes in the kidneys in addition to obliterating arteritis, cardiac hypertrophy, when present, was associated with degenerative changes in the heart walls and dilated cavities.

"In those forms of renal disease in which the principal changes were in the tubes, Malpighian capsule, and connective-tissue stroma, with little obliterating change in the vessels, I have found no true cardiac hypertrophy, but rather the changes which are characteristic of a Bright's heart.

"One who studies Bright's disease clinically in our large hospitals soon realizes that the heaving impulse and the increased arterial tension, which seem to be the essential features of the disease as described by many writers, are the exception rather than the rule, for in most of such cases it is difficult to determine the maximum point of cardiac impulse, it is so diffused and indistinct; and, although the cardiac area of dulness may be increased, the other signs of hypertrophy are wanting, and when, at the autopsy, a large flabby heart is found, one comes to look for other cardiac changes in chronic Bright's disease than muscular hypertrophy."

He then presents in tabulated form the renal, cardiac, and vascular changes which were found at the autopsies of forty cases of chronic Bright's disease. A general review of them gives the following conclusions:

As a rule, the more extensive the obliterating changes in the renal arterioles, the greater the degree of cardiac hypertrophy. I have been impressed by the distinct relations which one seems to bear to the other. In the few cases in which cardiac hypertrophy was not present with the obliterating changes in the arteries, the general nutritive condition was markedly faulty. In two instances of drunkards, although the kidneys were extensively granular and the arterioles much thickened, no evidence of hypertrophy existed, although the dilatation was excessive. Even in the cirrhotic kidney the primary cardiac hypertrophy has no necessary connection as cause and effect with the kidney changes, but both are a part of the general fibrosis which has its origin in a fibroid diathesis, either hereditary or acquired, the hereditary influences being far stronger than the acquired. In two cases where the cardiac hypertrophy was most extensive, the only change found in the kidneys was obliterating arteritis in the renal vessels. In the other varieties of Bright's disease the heart changes seemed to be directly dependent upon the renal disease, or rather upon the toxæmia and faulty nutrition which results from them; the evidence of this faulty nutrition was shown first and most markedly by changes in the heart walls and cavities.

In all forms of chronic Bright's disease increased arterial tension and more or less compensating hypertrophy is an early phenomenon. In the cirrhotic it is usually gradual in its development, in some cases extending over years, but in all instances, when the period is reached at which the renal symptoms clearly establish interference with the functional anatomical elements of the kidney, a feeble heart action and diminished arterial tension will indicate degenerative cardiac changes. When once the period of tension is passed, it can

never be re-established, except temporarily by the action of certain drugs.

Synchronously with the failure of heart power, changes occur in the venous blood system, which give rise to many of the distressing symptoms which are present in the advanced stage of so many cases of Bright's disease. There seems to be no fixed or uniform relation between the character and extent of the changes in the glandular structure of the kidneys and those in the renal and systemic vessels; the changes observed in the vessels of the pia mater, however, were usually less in degree than those in the kidney. In all cases where advanced cirrhotic changes in the kidneys existed the ventricular cavities were dilated. In cases of extensive dilatation, with little or no thickening of the cardiac walls, some form of degeneration of the muscular tissue existed. If the cardiac substance was soft and flabby, the fibres were granular, their nuclei obscured, and their striæ more or less obliterated, with a loss of consistence which allowed them easily to break down when an attempt was made to separate them. The papillary muscle of the mitral valves was frequently the seat of fibroid change, their columns having lost their fleshy appearance and assumed that of tendinous cords.

The edges of the flaps of the mitral valves were not infrequently found slightly thickened, but the evidences of acute endocarditis, secondary to the renal disease, were present in but one of my cases, while slight thickening and induration at the base and tip of the valves, indicating interstitial endocarditis, were present in a few cases.

The results of these studies seem to indicate that the cardiac changes in chronic Bright's disease have a wide range of variation, and that one cannot predict with certainty the exact nature of the change which may be present in any given case, except that they probably are degenerative, and that, sooner or later, a condition of heart failure will be reached which may fairly be designated as a Bright's heart.

The more marked these are in any case, the more unfavorable the prognosis. We must, as it seems to me, regard Bright's disease as a constitutional disease, in which the repair and waste in all the tissues of the body are imperfectly carried on, and in one way or another the kidney changes are expressive of other visceral and arterial changes, which, combined with the kidney lesion, make up the clinical and pathological history of the disease."—*N. Y. Med. Jour.*, Nov. 10, 1888.

Cardiocentesis.—Dr. William Pepper, speaking of this operation, advises as follows: "If there is a high degree of organic disease, I do not think that the question of an operation should be entertained for a moment. Operation would only be proper in those cases, and they are rare, in which there is acute and intense dilatation of the cavities and especially of the right cavities of the heart, with the peripheral veins empty, or at least not distended, and without sufficient organic disease to explain the dilatation, which is evidently the result of yielding of the muscular walls. It is only in such cases that the question of the propriety of cardiocentesis would be raised."

As to the point of puncture, he recommends the fourth interspace, not far from the left border of the sternum. This point will reach the right ventricle, which is preferable to puncturing the right auricle, on account of the liability of the latter to contain clots and "the records of cases prove that in a number of instances the needle entered these clots and no blood could be withdrawn."—*University Med. Magazine*, Oct., 1888.

Rotation of the Heart in Acquired Dexiocardia.—Two cases are reported by Dr. R. H. Babcock, with report of the autopsies, showing the nature of the rotation the heart undergoes in this condition, caused by the contraction of adhesions. In one case the rotation was from right to left and backwards, and in the other case in an opposite direction. "The factor determining the direction of the rotation is the point on the pericardium at which the adhesion between it and the pleura takes place, and not the anatomical arrangement of the parts. If this be on the posterior aspect, well over to the left, the turning will be backwards from right to left; if, on the contrary, the adhesions pull upon the anterior surface, the heart will have its left ventricle drawn to the front."—*Med. News*, Sept. 15, 1888.

Carter (A. H.) on Chronic Heart Disease.—In the early stages of cardiac failure our primary duty is to attend to the etiological indication. At the same time our object should be to reduce the demands upon the physical powers of the heart to a minimum by rest in the recumbent posture, always, however, bearing in

mind that it is only a means towards the attainment of a circulatory equilibrium, and that as soon as this is realized, further rest will only tend to weaken the system, and with it the heart also. The time has then arrived for graduated exercise. These are the primary indications for treatment in the earlier stages. It is at this period that heart-tonics, such as digitalis, strophanthus, caffeine, iron, and arsenic are invaluable *adjuvants*. They are good servants but bad masters: and there is a tendency to resort to them too indiscriminately, and to expect from them far more than they are able to afford.

The special features of the second stage—namely, the overloading of the tissues with fluid, and the turgid state of the systemic veins—provide a new indication for treatment; for so long as there is marked engorgement of the right heart, the course of treatment, which sufficed in the early stage, is now unequal to the occasion. This indication is *to reduce the fluids of the body*. If the condition is recent, a brisk hydragogue purge will often answer admirably. After such a purgative, digitalis will frequently act well when it had entirely failed before. In other cases, acupuncture of the swollen legs and withdrawal of fluid may be required. Periodical diaphoresis. too, is often most advantageous, and is most conveniently carried out by hypodermic injection of pilocarpine. It is a drug, however, that needs to be handled with caution and discrimination, especially where the circulation is very feeble. In a really urgent case, with the same object in view, venæsection may even be practised; but it is obviously a two-edged weapon, and should not be resorted to except in extremity.

Such are the means of temporarily and quickly reducing the fluids of the body. But, in order to maintain the advantage, it is necessary to restrict the amount of fluids ingested. With a little patience and tact, the total amount of fluids ingested in twenty-four hours may be brought down to one and a half pints, and even less. These measures are more likely to be successful the earlier they are brought into operation. After the congestive stage has lasted a long time, the general health becomes so much impaired that reaction from the morbid disturbance which has become established becomes increasingly difficult. How important then it is to recognize the pathological bearings of the situation as early as possible, so that valuable time may not be lost.

When once secondary structural organic disease has begun, and *a fortiori* if degenerative changes are considerable, treatment can only be palliative, and mainly consists of avoidance from undue exertion, gentle but systematic massage to keep up tissue nutrition, good nutritious food, abstinence from alcohol except for digestive purposes, and tonic remedies, such as iron, strychnia, and arsenic.

On the other hand, if the congestive troubles can be checked, and a temporary hydraulic equilibrium has been attained, the time has come to train up the heart, and to encourage development of cardiac power by carefully graduated exercise. The chief precautions to be observed are these: (1) Not to attempt it until circulatory equilibrium has been established for the patient in a state of rest; (2) to be moderate in the first instance; (3) to be increased gradually and with care; and (4) always to stop short of fatigue. Moderate palpitation and oppression of breathing on beginning the treatment need not be seriously regarded; but any tendency to syncope or cardiac irregularity constitute distinct contra-indication.—*Birmingham Med. Review*, Oct. and Nov., 1888. R. W. A.

MISCELLANY.

Gresswell (D. A.) on the Therapeutic Value of Oxygen Administered in Scarlet-Fever and in Certain Morbid Conditions Incident thereto.—Inhalations of pure or diluted oxygen gas and the drinking of oxygenized water charged under a pressure of 12½ atmospheres have been the means employed by the author to introduce this remedy into the system. The report is based upon the results of treatment in 588 unselected cases of scarlet-fever. The mortality in this series of cases was 7.6 %.

The water by itself is efficient in assuaging the febrile thirst, being taken greedily and subserving thereby several purposes. It reduces nausea, increases the appetite, reduces perhaps the fever and the delirium; further it aids in metabolism; it certainly serves to maintain an active mechanical flushing of the renal tubules, and in the latter process it may aid in the transudation out-

ward and removal of noxious bodies, possibly of the scarlatinal virus itself. Ordinary drinking-water will not serve the same purpose because patients can be induced to take but little. Nor will lemonade, and this for two reasons. In the first place, patients do not take it as freely as oxygenated water. And secondly, it needs to be borne in mind that carbonic acid is formed to excess in the febrile body; and this acid is known to interfere with capillary circulation; inhalation of it is said indeed to excite fatty degeneration of the cells of the convoluted tubes of the kidney and to be a cause of albuminuria. Hence we may surely doubt whether febrile thirst should be assuaged with lemonade or other carbonated water. Upon the whole, oxygenated water would appear to be the most convenient effervescing and appetizing water for exhibition to a person the subject of pyrexia. As regards the oxygen gas, it proved beneficial in many ways. Hopeless cases were revived by it, and existence was by it occasionally prolonged. It may be regarded as serving a useful end in a case of uræmic coma and in several cases of pulmonary complications. In badly nourished convalescents the appetite and the weight were quickly increased by it.

In several moderately severe cases the gas with the water appeared to have a powerful influence for good, as also in three cases in which the prognosis was undoubtedly very grave. And the tendency to albuminuria was without question diminished in cases in which the oxygen gas and oxygenated water were perseveringly administered.

And, further, in illustration of the influence of oxygen in this direction there are cases of pulmonary complications in which oxygen had apparently an almost immediate effect in reducing the strain put upon the kidneys, and doubtless thus minimizing the injury which these organs would otherwise have sustained. The need for brandy is much diminished by the use of oxygen, largely owing to the reduction of nausea and improvement of appetite which follow its administration; and reduction in the need of brandy must be considered an advantage of no mean order.—*Practitioner*, Oct. and Nov., 1888.

Rolleston (H. D.) on the Possible Danger of Paraldehyde in Chronic Emphysema. — Paraldehyde has been much used clinically, its chief recommendation being that it is said to be without any depressing action on the heart.

The author has frequently seen it administered, and, though it has not proved a powerful hypnotic, it has not been attended in his hands by any bad symptom except in the instance related.

A married woman was admitted April 3, 1888, suffering from advanced emphysema, slight bronchitis, and dilatation of the right side of the heart. Her face was dusky, and the distension of the veins of the neck and chest showed that considerable venous engorgement existed. There was no cardiac murmur. The respirations were rapid, numbering sixty to the minute. On April 11th, about 1 A.M., as she was not inclined to sleep, the following dose was given:

Paraldehyde	ʒi.
Syrupi tolutani	ʒi.
Aquæ	℥i.

An hour later, at 2 A.M., she became rather suddenly dyspnœic and collapsed; the respirations were 80, and shallow; the pulse 156, and weak. She was promptly treated with two ether draughts (two drachms of ether), a poultice to the chest, and the application of four leeches to the bottom of the sternum. The paraldehyde made her sleepy, she wandered and rambled a good deal, but her pulse and respiration improved, and by 4 A.M. she became calm and her respiration quiet.

The suspicion that the relation between the administration of paraldehyde and the occurrence of these alarming symptoms was that of cause and effect arose, but was dismissed, and the event regarded as a coincidence. That this, however, was not the case appeared probable from the result of administering a similar dose of paraldehyde to induce sleep on the night of April 14th; the draught was almost immediately followed by symptoms similar to those exhibited on April 11th. An ether draught (containing a drachm and a half of ether), hot applications to the chest, and the injection under the skin of liquor strychninæ hydrochloratis ℥iv., revived her. After this no more paraldehyde was given.

Her condition did not improve, and she died at 2.30 P.M. April 29th.

No post-mortem examination was obtained.—*Practitioner*, Nov., 1888.

Handford (H.) on Empyema: Loss of Vision in the Right Eye, afterwards in Both; Hemiplegia; Death; Cerebral Softening, Involving Especially the Angular Gyri and Oc-

cipital Lobes.—A young woman, æt. eighteen, married two years, developed symptoms of left pleurisy, and in March, 1887, she was tapped, and about two pints of pus evacuated. No drainage tube was inserted, and the wound soon closed. She was delivered of a still-born seven months' child, and six weeks later was admitted into the hospital. On June 11th an incision was made in the left fifth interspace and the posterior axillary line, by my colleague, Mr. Wright, and a large quantity of pus removed. A tube was inserted, and antiseptic absorbent dressings applied, but the pleural cavity was not washed out. The patient improved considerably, the discharge lessened, and the tube was left out, but somewhat later had to be reinserted. The discharge remained sweet. On July 29th the patient had an imperfect rigor with some rise of temperature. On August 15th she complained of pain and aching in the right eye without apparent cause. August 14th, there was marked loss of vision in the right eye, she could trace the movements of a hand but not count the fingers. August 16th, the fundus was pale, and there were signs of slight neuro-retinitis. On September 5th there was total blindness of the right eye, not even perception of light remaining. The pupil was dilated and insensible to light, but moved in sympathy with the left eye. The margins of the disc were not sharply defined, the retinal arteries rather below the average size; veins not distended; very slight effusion of lymph along the lines of the vessels and radiating from the disc; yellow spot visible and normal. Appearance: Rest of retina pale and bluish, no hemorrhages. The left eye presented similar changes, but to a slighter degree. Vision of left eye fairly good. The loss of vision was attributed to a cerebral cause, which it was hoped might be functional, as the patient developed about the same time a remarkable emotional condition. On September 8th some dimness of vision was complained of in the left eye. September 19th, the left eye soon began to improve. Slight perception of light also returned to the right eye (?). She complained of loss of power on the right side, but when requested could move the right arm and leg freely, although with less power than the left. There was also some difficulty in speaking. A few days later she was taken home, and very shortly hemiplegia became complete, and there was absolute loss of sight in both eyes. She only answered "yes" and "no," and that at random; there was some excitement and very great loss of mental power. She died about the end of September. At the inspection, post-mortem, very extensive white (ischæmia) softening was found on both sides, affecting chiefly, but not confined to, the white matter. That portion of the gray matter which derives its nutrition from the vessels of the pia mater was not much altered. The softening affected chiefly the occipital lobes, and the angular, temporo-sphenoidal, and part of the ascending parietal convolutions on the right side. On the left the occipital lobe, the angular, supra-marginal, and first temporo-sphenoidal convolutions, and much of the frontal lobe, the corpora quadrigemina, basal ganglia, and optic tracts presented no naked-eye departure from the normal. There were no distinct abscesses in the brain or in any of the other organs; nor was there any heart disease, valvular or other. The loss of sight was the first symptom of brain affection, preceding the earliest symptoms of aphasia and hemiplegia, by about five weeks. Further, there was nothing of the nature of hemiopia. The microscopic appearances showed degeneration and disappearance of the nervous elements, copious infiltration with leucocytes, and proliferation of the neuroglia forming a dense network.—*Med. Press*, Oct. 31, 1888.

Sharpless (W. T.) on Embolism of the Middle Cerebral Artery: Left Hemiplegia, Ulcerative Endocarditis, and late General Convulsions, and Skin Infarcts.—A man of 31 had been very intemperate for several years, and there was a probable history of syphilis although he denied it. He had acute articular rheumatism last winter which was his only attack. In March last he was suddenly paralyzed on the left side and entered the hospital on April 18th. His condition Aug. 1st, when he came under Dr. Mills' care, was as follows: Left hemiplegia; paralysis marked in the arm, less so in the leg, and not at all in the face; œdema of feet and legs, extending to the knees. He had a very loud-double aortic murmur that could be heard as far down the back as the sacrum. Area of cardiac dulness was very much enlarged, as was also that of the liver and spleen. The urine contained albumen in

considerable quantity, and later hyaline, granular, and a few epithelial casts were found. In testing his sensations it was found that he could not perceive a light touch as well on the paralyzed side as on the other; but the sense of pain was preserved. Paralyzed muscles responded to the faradic current and showed no reactions of degeneration. His temperature rose to 101° or 102° every evening and regularly fell to normal in the morning.

On Sept. 6th he had two general epileptiform convulsions, and later he had another of a similar character.

On Sept. 15th petechial spots were noticed on his legs and ankles, which increased in size and depth until his death, which occurred Oct. 15th. These spots varied in size from that of a pin's head to a dime, and showed no disposition to heal. They were probably skin infarcts.

Autopsy, October 15th: Right middle cerebral artery close to, but just beyond its origin in the internal carotid, was closed by an evidently old embolus. All branches of the middle cerebral beyond this were thready and cord-like, and could be distinctly seen lying in a bed of yellowish softening, which extended over the island of Reil and the internal surface of all the convolutions which cover in the Sylvian fissure. The cortex of the motor zone, except as just stated, was not softened. A cut through about the middle of the lenticular body revealed softening of the entire breadth of the internal capsule and adjoining lenticular and caudate bodies. This softening was in the middle part of the capsule and did not extend into the anterior and posterior third. Evidently some collateral circulation had been established between cortical branches of the middle and the anterior and posterior cerebral arteries. This was plain in several places where the narrowed and atrophic vessels beyond the embolus again took up their calibre.

The heart was enormously hypertrophied. On the tricuspid and aortic valves were the vegetations of recent ulcerative endocarditis, with a perforation on the septum leading from the left to the right ventricle, just below the aortic ring.

Probably the sequence of events in this case was as follows: First, the abuse of alcohol, and the syphilitic infection; then disease of the aortic valves resulting in their thickening and contraction; next, in March last, the embolus lodging in the middle cerebral artery and producing the hemiplegia; and recently the ulcerative process engrafted on the sclerotic valves.—*Med. News*, Nov. 17, 1888.

Murphy (J.) on a Case of Gastrostomy; Death on 403d Day.—The patient was a man of 47, with no hereditary taint, who in April, 1887, first noticed a dysphagia due, as subsequent events proved, to carcinoma of the œsophagus. September 8, 1887, gastrostomy was performed as swallowing had become entirely impossible and the patient was nearly starved to death. He was fed by enema for 5 days and when union between the parietal peritoneum and wall of the stomach was complete the latter was punctured and from that time on the patient was fed through a rubber tube inserted through the wound. He at once gained much in flesh and strength so that the operator almost began to question the accuracy of his diagnosis of malignant disease. About October, 1888, however, the patient began to cough and lose flesh and on October 15th, during a fit of coughing he vomited about a quart of bright-red blood and died.

An autopsy revealed carcinoma of the œsophagus which had eroded the aorta.—*Br. Med. Jour.*, Oct. 27, 1888.

[In the same journal Dr. Archibald Carmichael narrates a case of gastrostomy for malignant disease of the œsophagus in a woman of 38. The patient improved and lived 102 days, finally dying of pneumonia. —Editor.]

Furey (J. W.) on Chronic Ulcer of the Leg.—The ulcer was dressed as follows: From an old muslin piece I first cut a patch the exact size and shape of the sore inside of the raised border. I then trimmed a piece of oil-silk to the same shape, but so as to extend one third of an inch beyond the edges of the muslin. The muslin was then dipped in a solution of corrosive sublimate (two grains to three ounces of water) and applied to the depressed surface of the sore, nicely fitting within the edges. Oiled silk was then adjusted over the top of this application, its edges extending to the line of healthy tissue. Over the limb, from the toes to the knee, was applied a roller bandage. This dressing was changed once or twice daily, as long as the corrosive-sublimate solution was used. From the very first, an improvement was apparent. The glistening, pale

surface of the ulcer began to redden and to have poured out a better quality of pus. The hardened margins softened and sloughed away to healthy adjacent tissues. This treatment required about two weeks. I had now instituted just what I desired—action,—and henceforth I expected to continue the cure with no trouble. Discontinuing the corrosive-sublimate solution, I substituted for it a solution of sulphate of zinc (one half grain to the ounce of water). As the process of repair went favorably on, if any thing led me to suspect hyper-stimulation, simple water-dressing was used for a few times. As little, healthy granulations, which in turn became larger and progressed towards the centre of the ulcer, notches, corresponding to the granulations in size, shape, and position, were made in the muslin, so as not to include them in its covering. The oiled silk was trimmed accordingly as soon as the new growths had attained sufficient size and maturity. The more mature they became, the stronger seemed their disposition to push out into and to fill up the unhealed portion of the ulcer.—*Med. Register*, Nov. 13, 1888.

Ackermann (G.) on Watermelon Seed in Right Bronchus; Operation; Recovery.—The patient was a child of two. The seed had been swallowed four days. The child was bright, and playful, not suffering much inconvenience from the foreign body, except that her voice was husky and she had an occasional violent paroxysm of croupy coughing, attended with attacks of suffocation. On auscultation there was found delayed inspiration over the right lung, the vesicular murmur assuming a cog-wheel-like character. This was apparently produced by the partial closure of the right bronchus.

Emetics had been tried in vain, as well as shaking and thumping the child while holding her head downward.

I performed, under chloroform anæsthesia, inferior tracheotomy. The fat neck of the child, and the numerous vessels in this locality, necessitated a careful and slow dissection down to the trachea. Making an incision about three quarters of an inch in length, and introducing four loop ligatures through the cartilage, the aperture was held open by an assistant, while I held the child heels up, shaking it and causing expulsive coughing by irritating the trachea with a small feather. These efforts were futile, however, and recourse was had to a pair of slender curved forceps. The child lying on its back, the forceps were gently introduced through the incision, down to the extreme end of the right bronchus, where the seed, which had firmly lodged, could be just grasped by its end and easily withdrawn. It was an ordinary-sized watermelon seed, somewhat swollen by the secretions.

The tracheal incision was closed by four sutures, and the external tissues drawn together by several sutures, a small drainage tube being inserted into the lower angle of the wound. The dressing consisted of iodoform plentifully sprinkled over the wound, and several layers of carbolated gauze loosely bandaged around the neck.

The little patient recovered quickly from the operation, and was apparently much relieved of the first-mentioned symptom. There was no elevation of temperature, the wound healed by granulations, and in ten days the child was taken home.—*Med. News*, Nov. 10, 1888.

Cohen (B.) on a Case of Traumatic Tetanus, with Recovery.—This case is chiefly interesting because of the variety and amounts of the medicines used. In forty days during which active tetanic symptoms lasted, and during about fourteen days only were heroic doses given, the medicines were as follows: Chloral, ℥ ji.; bromides ℥ iv.; eserine, 15 gr.; coniine, 15 gr.; curare, $\frac{1}{4}$ gr.; morphia, 15 gr.; ex. opii, gr. iv.; dialysate of digitalis, ʒ ii.; antipyrine, ʒ iv.; phenacetine, ʒ i.; tinc. cannab. indicæ, ℥ i. The maximum of medicine given in twelve hours to this thirteen-year-old boy was as follows: Eserine, gr. $1\frac{1}{8}$; coniine, gr. $1\frac{1}{8}$; curare, gr. $\frac{1}{8}$; bromide of potass. and bromide of soda, each, ʒ jss.; iodide of potass., gr. xvi.; antipyrine, gr. xxx.; chloral, ʒ v.; phenacetine, gr. xxii.; tinc. cannab. indicæ, ʒ i.; morphia sulph., gr. $\frac{1}{8}$.

The subcutaneous injection of $\frac{1}{15}$ grain of curare (Merck's in aqueous sol.) seemed not to have much of an effect, though, perhaps, it lengthened the time between the spells when the disease was on its decline.

Eserine, $\frac{1}{10}$ of a grain subcutaneously, and internally in the same amount, seemed to have be best effect in allaying the intensity of the spasms, but it was probably the cause of the diarrhœa which was present.

Chloroform did not act well. It would only in a measure control the spasms, and it seemed as if the next one would come sooner, and be longer in duration. It was therefore abandoned after a few trials.—*Buf. Med. and Surg. Jour.*, Nov., 1888.

Osler (W.) on Pachymeningitis Hemorrhagica. — There are several points of interest in this condition :

First.—Is it in any sense of the term an imflammatory process? Practically, we see one of three conditions in these cases :

a. Subdural vascular membranes, often of extreme delicacy.

b. Simple subdural hemorrhage.

c. Combination of the two—vascular membrane and blood-clot.

In two specimens which I showed last year I remarked on the absence of any of the features to which we could apply the term inflammatory.

Wiglesworth takes the same ground. Apart from injuries, dura-arachnitis is rare. I have seen two instances in the specific fevers. In both there was delicate fibrinous exudate between the dura and the arachnoid.

Second—Which is antecedent, vascular membrane or hemorrhage?

It is usually stated that the hemorrhage occurs first, and from the blood-clot, when organized, the vascular sheet arises. This may be the case, and the fact that subdural hemorrhage is often found alone—in fifteen out of forty-two cases in Wiglesworth's series—lends weight to this view. On the other hand, the vascular membrane may exist without a trace of past hemorrhage; neither staining nor melanin grains, simply a fibrous sheet, varying in thickness and permeated with large vessels. The specimen now under consideration illustrates this condition : It was removed from a man, aged fifty-six, who died of aneurism. The skull-cap was unusually thick and dense, and extremely vascular. The meningeal arteries ran in deep grooves through the bone. There were many points of vascular union between the inner table of the skull and the dura. In spite of this the calvaria was removed without much difficulty. The inner surface of the dura was everywhere covered with a fibrous, highly vascular membrane. Toward the vault it was from half a line to a line and one half in thickness. Toward the base it was extremely thin. It was chiefly made up of large veins, forming in places beautiful arborescent tufts. On section, where the membrane was thickest, the veins bled freely, but there was no trace of clot. Microscopically, the membrane was composed of bundles of connective tissue, forming a supporting framework for the numerous vessels. At one small area alone, in the middle fossa on the left side, there was a brownish-red staining on the surface of the vascular membrane.

Third—Whence the hemorrhage, dural or pial?

I have always thought the former, but I see that Wiglesworth, in referring to the atrophy of the convolutions as a possible cause for hemorrhage, speaks thus : "The pia mater over a variable area may be so intensely congested as actually to resemble an ecchymosis . . . It is manifest that the conditions may be highly favorable to actual rupture, and I doubt not that this frequently occurs."

Certainly in the instances I have seen the subdural membranes were intimately associated with the dural vessels, and it seems more probable that from these the hemorrhage always proceeds.

Fourth—The explanation of the occurrence of this singular structure is by no means clear. The cases are commonly met with in asylums. In general hospitals, years may pass without seeing an instance. During eight years in the post-mortem room of the General Hospital of Montreal, no instance occurred. The first specimen which I saw, after having been for fourteen years interested in the morbid anatomy, was demonstrated by Virchow, in 1884, at the Pathological Institute. At the Philadelphia Hospital cases are by no means uncommon. Within the past two or three months there have been four specimens found, usually in the bodies of persons from the insane department, but in three instances the patients came from the medical wards, and had not shown any mental symptoms.

One reason urged why the subdural hemorrhage is much more common in the insane is the atrophy of the convolutions so constantly associated with this condition. But there must be something more than this, for if atrophy alone is the chief factor, we certainly would meet with it in phthisis and in other cachec-

tic conditions in which the cerebral wasting is quite as common as in general paresis.

The frequency of this condition in asylum work may be gathered from the fact that Wiglesworth's paper is based upon forty-two specimens which occurred in a series of four hundred unselected post-mortem examinations, in which the persons died of various forms of insanity.—*Med. News*, Nov. 17, 1888.

Hutchinson (J.) on Persisting Aptyalism—"Dry Mouth."—The patient was a widow of fifty, in good general health, but who had passed through much trouble. The condition of aptyalism came on without any definite cause, and not very suddenly. In the course of a few months her tongue, cheek, lips, and palate became absolutely dry. They had remained in this condition without any alleviation for now about four years. The tongue was clean, red, and much sulcated. Its dryness was such that the lady had difficulty in making herself understood in talking. The pharynx also was dry, but there was no defect of secretion in the nose, and no difficulty of the flow of tears, or of moisture in the conjunctivæ. She perspired freely and indeed on her face and forehead was liable to perspire on any slight emotional excitement. Mr. Hutchinson gave a brief summary of the cases previously recorded, five in number, and remarked upon the very close similarity which they bore to each other. The first case, to which the name had been applied, was one brought forward by himself at the Clinical Society, two years ago. The subject had been ably investigated by Dr. Hadden last year, who then brought forward a second case at this Society, and narrated the particulars of two others. One of the latter was recorded by an anonymous writer under the name of suppression of the saliva in the *Medical Times and Gazette*, as far back as November, 1868. In all these five cases the patients were women past middle age, and in all the condition having once begun had proved to be persistent. Whilst in none had it been the precursor of any other disorder of the nervous system. Although the condition had persisted for three or four years, up to the present date, there had been no material depreciation of the patient's health, a fact of some interest when it is remembered that the insalivation of the food was completely arrested. Dr. Hadden had recorded in his case some benefit from the persistent use of jaborandi. This remedy had been tried for short periods in the author's first case, but without obvious benefit. In his second case he had only seen the patient once, but she had previously been under much treatment, and had probably tried that drug without definite benefit. The disease was, he remarked, evidently a very definite one, and probably no doubt a number of cases of it would soon be placed on record. Its essence consisted in a complete, and seemingly permanent arrest of all salivary and buccal secretion. He had originally used the term of "dry mouth" for it; but would now propose as a more accurately descriptive term the name of "persisting aptyalism."—*Med. Press*, Oct. 31, 1888.

Operation for a New Bladder.—Tizzoni and Poggi of Bologna have devised and carried out an extremely ingenious operation for the purpose of "restoring" the bladder in cases where it is partially destroyed by disease. The object of the operative procedure is to replace the bladder by means of a substitute, that substitute being a portion of intestine. The operation (on an animal) was performed in two stages, an interval of about a month elapsing between them. The first part of the operation consisted in the cutting out of a portion of the intestine, the two ends from which it was taken being immediately sutured; the mesentery was left attached to the excised portion. The ends of this portion were then closed so as to form a sac; one end was then brought down and fixed to the neck of the bladder. The second portion of the operation consisted in separating the ureters from the bladder, excising the latter organ, suturing the intestinal sac in the position of the bladder, and grafting the ureters on to its posterior wall. For a few days there was incontinence of urine, but after about a fortnight the sphincter regained its power and the animal recovered completely. In consequence, however, of the small size of the new bladder, micturition was necessarily very frequent. They propose to repeat this operation on another animal, taking care to excise a larger portion of intestine, so as to imitate more nearly the normal capacity of the bladder.—*Lancet*, Nov. 10, 1888.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of

CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital; CONDICT W. CUTLER, M.D., Instructor in Diseases of the Skin, Post-Graduate Medical School, New York; JOHN S. HAWLEY, M.D., Attending Gynæcologist, New York Hospital, Out-Patient Department; FREDERICK PETERSON, M.D., Lecturer on Nervous Diseases at the New York Polyclinic.

VOL. V., NO. 48. November 29, 1888. WHOLE NO. 96.

CONTENTS.

	PAGE
Leading Article	569
Cerebral and Other Nervous Affections arising from Disease of the Middle Ear,	571
Alcohol and its Effects on the Human Body	573
Miscellany	580
Book Notice	580

LEADING ARTICLE.

Exophthalmic Goitre.—Cases of this disease reported in the medical journals are very numerous, and most writers agree that it is dependent upon some lesion of the nervous system; but there seems to be a great diversity of opinion as to the part involved, the majority, however, favoring the idea that it is of central nervous origin. Filehne,[1] from experiments, concluded that:

"1. Basedow's disease may be produced by paralysis of certain nerve regions which are controlled by the medulla oblongata. The points traversed in common by the nerve paths concerned are the restiform bodies.

"2. Under such circumstances the exophthalmos and the goitre depend upon dilatation of the blood-vessels.

"3. The increased rapidity of the heart's action is brought about by a diminution or abolition of tone in the vagus.

"4. That Basedow's disease in human beings depends on the same physiological relations is highly probable, but must first be established by proofs afforded by pathological anatomy. In this investigation attention should be directed not only to the medulla oblongata, but also to the condition of the trunk of the cardiac portion of the vagus." And, finally, he takes care to point out that even if post-mortem examinations should give negative results, this would not be, necessarily, fatal to his theory, as the occurrence of functional affections of the central nervous system (*i. e.*, those in which it is, as yet, impossible to find an organic lesion) is admitted.

Eshner[1] thinks "that the symptoms of exophthalmic goitre are best explicable on the theory of a lesion of the medulla oblongata, involving the cardio-inhibitory centre, the vaso-motor centre, the respiratory centre, perhaps, also, the diabetic centre, and other vital points concentrated in this neighborhood."

Peterson[2] considers that "an anatomical lesion in the cardio-inhibitory nerve-path, or its medullary centre, which diminishes but does not destroy its functional activity, is the cause of Basedow's disease."

Dr. J. Michell Clarke[3] explains the palpitation by deficient action of the cardio-inhibitory centre, the loss of vaso-motor tone, by some depressing influence, acting on the adjacent vaso-motor centre, these being primarily caused by some abnormality of the processes of assimilation and nutrition in the patient. "While the exophthalmus and pulsating goitre may be caused by a similar process extending to subordinate vaso-motor centres in the cervical spinal cord for the eyeball and thyroid—exophthalmos being probably caused in part by stimulation of the muscle of Müller."

He reports a case with autopsy where examination of the pons, medulla, part of the cervical cord, liver, kidneys, pancreas, and thymus showed them to be healthy.

Drummond[4] thinks that the majority of

[1] Extract from Prize Essay, by A. E. Eshner, M.D., 1888.

[2] *Medical Record*, Aug. 20, 1887.

[3] *Bristol Medico-Chirurgical Journal*, March, 1888.

[4] *British Med. Journal*, May 14, 1887.

cases of Graves' diseases are examples of a functional neurosis of the sympathetic and perhaps of the associated centres in the cord and medulla (especially the latter). He reports the autopsies of two cases in both of which the cervical ganglia were examined microscopically and no lesion found. One of these cases presented well-marked cerebral symptoms, in which examination of the medulla gave negative results. Various causes of this disease are assigned: fright, excitement, mental emotions, anæmia following acute diseases, traumatism of the head, and some writers mention an hereditary predisposition, or that parents were subject to some morbid condition of the nervous system. Dr. J. H. Wallace [1] mentions an instance of mother and son suffering from the disease. Dr. W. C. Bailey [2] says "it is frequent in families having ordinary bronchocele. In no less than ten recorded cases I find both diseases co-existing in the same family." Dr. A. T. Sloan [3] mentions a case of bronchocele, the mother of the patient dying of exophthalmic goitre.

Dr. Hughlings Jackson [4] mentions two sisters who had Graves' disease, and that a third sister was said to have it. Doctor Cheadle [4] had seen four cases of Graves' disease in one family. Dr. W. H. White [5] mentions three sisters all of whom suffered from it.

In addition to cardiac acceleration, exophthalmos and thyroid enlargement, nervousness, flushing of the face, sweating, diarrhœa, amenorrhœa, and disturbed menstrual function are noticed; several instances of bronzing of the skin of the face, neck, axilla, nipples, lower part of abdomen, and upper part of the thigh are reported. Drummond [6] believes pigmentation of the skin to be one of the most constant signs of the disease; the same writer calls attention to the more marked mental disturbances sometimes seen—mania and melancholia.

If any difference exists in the two sides of the thyroid it is in favor of the right side, this being the more often enlarged. Glycosuria has been noticed in several cases, and this is added to the reasons why the disease is of central origin. In three cases reported, enlargement of the tonsils was noticed as a symptom. Charcot [7] calls attention to the fact that the electrical resistance of the body is diminished in this disease, and Dr. Wolfenden, of London, undertook to verify this statement. He found that the average resistance in a number of healthy persons was between 4,000 and 5,000 ohms.

But in eight cases in which exophthalmic goitre was well marked it was only between 500 and 700 ohms, and in twelve other cases, presenting unmistakable early symptoms of the disease, it ranged between 1,000 and 1,300 ohms. Consequently he attaches great value to the sign, and quotes Charcot's remark that cases of the undeveloped form would sometimes be very difficult to diagnosticate were it not for the palpitation, the tremor, and the diminution of the electrical resistance which reveal their true nature. Wolfenden emphasizes the fact that in ordinary goitre the electrical resistance is not diminished; he has never found it less than 5,000 ohms, and in one case of malignant disease it was as high as 5,000 ohms. He gives the results of his examinations in cases of hemiplegia, epilepsy, cerebral softening, paraplegia, general paralysis, and hystero-epilepsy; in all of them, except one case of general paralysis, the resistance was diminished—most decidely in epilepsy and hemiplegia, to as low a point as 1,300 ohms in one instance.

The prognosis is not good, as a rule. Of twelve cases Dr. White [5] reported, five only were alive. Two had died suddenly. He says: "The lesson to be learned from these figures is that the prognosis of Graves' disease is bad, for the patients are partly liable to death from sudden syncope, and also seem more likely to die from other causes, apparently unconnected with the exophthalmic goitre, and of those who do not die many do not completely lose the disease. One case ran an acute course, from commencement to the time of death being only six weeks."

The lines of treatment are various. Iron, digitalis, belladonna, local applications of iced water, iodine externally and internally, ergot, quinine, sulphuric acid, and various other drugs are recommended. The treatment which has seemed to do the most good has been the administration of electricity, and both the faradic

[1] *Peoria Med. Monthly*, 1886.
[2] Paper read before Central N. Y. Medical Society, Rochester, May 18, 1886.
[3] *British Med. Journal*, Nov. 6, 1886.
[4] *British Med. Journal*, May 15, 1886.
[5] *British Med. Journal*, July 24, 1886.
[6] *L. c.*
[7] Quoted in *N. Y. Med. Journal*, Jan. 21, 1888.

and galvanic currents are used either alone or in combination with each other. The latter method is recommended by Charcot. He directs the use of the faradic current: one electrode on the nape of the neck, the other over the carotid below the angle of the jaw, then lightly over the eyes. Then the thyroid gland should be faradized. Following this the anode of the galvanic battery is placed on the inner third of the left third intercostal space, the cathode at the nape of the neck, the sitting to be repeated on alternate days for ten to fifteen minutes.

Dr. R. Vigouroux[1] lays great stress upon the kind and method of application of electricity in the treatment of this affection. He employs faradization in the following manner: (1) A large electrode from 7 to 8 ctm. in diameter is applied to the inferior part of the neck posteriorly, and is held in position by the means of a band. The other electrode is olive-shaped or button-shaped, less than 1 ctm. ($\frac{3}{8}$ in.) in diameter, and is connected with the negative pole of the battery. The electrode is applied behind the angle of the jaw, in front of the sterno-mastoid muscle, and is made to press upon the carotid artery. The application is made during a minute and a half, and is then transferred to the opposite side, where it is continued for the same length of time. The small electrode is then passed lightly over both orbiculares palpebrarum in turn. (3) The olive electrode is now replaced by a plate 4 ctm. ($1\frac{3}{4}$ in.) in diameter, and is applied to the thyroid tumor. (4) The small electrode is now rendered positive, and is applied to the precordial region, in the third intercostal space, to the left of the sternum, and the current should be sufficiently strong to just excite fibrillary contractions. The application is made for two or three minutes. The séances are repeated every second day. There is no advantage in repeating them daily. The ill success of the treatment of this affection by some, the author thinks, is due to want of attention to the foregoing details. Some cases get well spontaneously. Two cases[2] recovered without treatment after removing from the locality in which they lived.

WALTER VOUGHT, M.D.

[1] Quoted in *N. Y. Med. Journal*, March 10, 1888.

[2] *W. C. Grave's Buffalo Med. and Surg. Journal*, 1886.

CEREBRAL AND OTHER NERVOUS AFFECTIONS ARISING FROM DISEASE OF THE MIDDLE EAR.[3]

BY A. T. MUZZY, M.D.

Harsant (W. H.) on a Case of Suppurating Middle Ear; Thrombosis and Phlebitis of Lateral Sinus; Death.—A shoemaker of seventeen entered the infirmary July, 1886, with severe pain of left side of the head of four days' duration, with otorrhœa. Has had repeated attacks of pain, swelling, and otorrhœa since early life, following measles. Right ear somewhat affected also. Day before admission he had a fit, and vomited. From entry to death, the sixth day after, the temperature varied from 104° to 106°; the pulse from 90 to 100; frequent rigors took place; coma deepened; the patient lying curled up the right side, yawning frequently, and when aroused irritable. The second day after entry, Wilde's incision showed no abnormality of the mastoid; and a button trephined just behind the mastoid only opened the lateral sinus, the hemorrhage from which was very readily controlled. The operation made no impression on the condition of the patient. At the *post-mortem* a large thrombus was found filling the lateral sinus just in front and above the wound made by the trephine, extending an inch forwards, and surrounded by a mass of pus granulations, etc., lining the sinus at this point. It is not probable that the thrombus was due in any way to the trephine, but had existed some days before the wound was made. There was no sign of cerebral or cerebellar abscess. There was no caries of the temporal bone, or meningitis over its surface. The left external auditory meatus was filled with granulation tissue, and the middle ear was filled with caseous purulent material.—*Bristol Med.-Chirur. Jour.*, March, 1887.

Field on Suppurative Meningitis Caused by a Bead in the Ear.—Into St. Mary's Hospital, February, 1888, was brought a girl three years old. She had purulent otorrhœa due to attempts to extract a bead which got in five weeks ago. Otorrhœa ceased on removal of foreign body. Some tenderness only over mastoid; but usual symptoms of meningitis increased

[3] A very interesting communication on associated cerebellar and aural disease will appear in our next number.—EDITOR.

until death seven days after entry. Temperature oscillating between normal and 104° F.; pulse frequent and small; great restlessness; intractable vomiting; retraction of the head, but retraction of abdomen was absent. Coma began two days before death, with dilated immovable pupils. *Post-mortem* showed general meningitis of the convexity, with pus more abundant over right temporo-sphenoidal region, base, pons under surface of cerebellum and medulla. No focus of suppuration was found. No perceptible abnormality in the dura mater covering the roof of the tympanum was found.—*Brit. Med. Jour.*, June 9, 1888.

Gem (W.) on Intra-Cranial Suppuration with Negative Symptoms.—At the London Infirmary a cork-cutter, thirty-eight years old, well-developed man, was admitted, suffering with right hemiplegia, both of motion and sensation, also aphasia of three weeks' duration. This followed a fall while in a fit after a drunken debauch, striking the left side of the head. Only symptoms: indefinite pains in the head, radiating towards the occiput and down the neck; and obstinate constipation. Other symptoms, as fever, amblyopia, ptosis, otorrhœa, regional tenderness of scalp or wound, all absent. Under a cathartic, and blister to the neck, much improvement for a month took place. The nurse then noticed a slight discharge from the ear and a moderate swelling under the ear. The only complaint was sensation of cold. This was remedied by clothing; but in fifteen hours he dropped off without symptoms.

Necropsy.—Body well-conditioned; no congestion of meninges, but under dura mater, opposite first occipital convolution, was an abscess the size of a hen's egg, with well-developed lining membrane and filled with pus. Another abscess was over the supra-marginal convolution, which channelled the brain substance by the sylvian fissure to the under side of the brain and the temporo-sphenoidal lobe. There was superficial necrosis of the temporal ridge and a perforation of the dura opposite the internal auditory meatus, and a second perforation at the jugular foramen. These accounted for pus in ear and swelling in the neck. Section of ear showed no signs of otitis media. The other pathological phenomena were those usual to alcoholism, cirrhotic liver, hypertrophied and congested spleen, and congested kidneys. Were these abscesses due to breaking down of blood clots, from patient's debilitated condition and debauch?—*Lancet*, Aug. 4, 1888.

Clark (H. E.) on a Case of Intracranial Abscess.—A prisoner awaiting trial for assault had his left parietal and temporo-sphenoidal region of skull trephined for a sinus existing which had discharged pus. Patient had had two attacks of inflammation of the middle ear, one five years ago and the other six months. Four months before being operated upon, discharge from ear had ceased, and he had then experienced headaches, followed by a swelling at the point finally trephined. The swelling was lanced, the sinus found, which had continued to discharge until the operation. When the button of bone was removed pus welled up freely, and a probe passed to the petrous bone, but the connection with the ear was not found. The interesting point of the case is absence of all motor phenomena due to cortical irritation and pressure.—*Glasgow Med. Jour.*, June, 1888.

Lewis (R. H.) on Necrosis of the Labyrinth and Facial Paralysis.—In September, 1887, Mrs. R. sought advice for her right ear. Ten years ago, without any previous trouble, this ear was seized with severe pain followed by discharge. Six months later and eighteen months respectively, similar though lighter attacks were experienced. Until the summer of 1885 only occasional slight otorrhœa, not sufficient to annoy her. Toward the end of the summer the discharge increased, and for the first time had *vertigo*, so marked as to force her to support herself on neighboring objects when walking. But there was *no pain*. The family physician detected dead bone and urged seeking special advice. After several weeks the dizziness disappeared, but the discharge remained, varying in amount.

In August, 1887, the giddiness reappeared, and soon became extreme; then pain, which extended from ear to occiput and forward to the forehead, and was very intense. A week ago, before I saw her, she became unconscious for two hours. She at this time first noticed paralysis of right side of face. It was more a paresis, as by much effort the eye could be partially closed. On appearing at my office she was quite feeble, with the usual characteristics of facial paralysis of the right side. There

was no redness, tenderness, or swelling on the mastoid process, nor had there been at any time. She was absolutely deaf on the affected side, and had experienced tinnitus only at the very beginning of the trouble ten years ago. The external auditory canal was large at the inner extremity, and the drum was concealed by polypi sprouting through a large perforation and bathed in pus. In a few days dead bone was detected, but not removed from interference of the granulations. These were finally subdued by pure chromic acid. On the 14th of February the sequestrum was finally removed, and proved to be the complete lower turn of the cochlea with the modiolus. Subsequently to this she speedily recovered.—*North Carolina Med. Jour.*, May, 1888.

Hulke (J. W.) on Trephining for Evacuation of Intracranial Abscess Occurring in Connection with Suppurations in the Ear.—A maid-of-all-work, nineteen years old, was admitted March, 1886, to the Middlesex Hospital; a well-developed brunette; apathetic; complaining of headache, most intense in vertex and right side of head. Right ear wholly deaf; external canal full of fetid pus, on removing which a polypus was seen and removed, when bare bone was detected at the bottom. Great tenderness exists over the mastoid, and to a less degree over right side of the head. Slight right facial paralysis. Temperature subnormal. Pulse 50, small and irregular. Left ear also quite deaf. Four years ago was treated for double otorrhœa. Four weeks ago fell, striking her head on a table, leaving her dazed for two days. For past three weeks headache, with occasional vomiting, both of which increased. On day of entry, mastoid cells were opened, with negative result. Two days later, symptoms increasing, the skull was trephined two centimetres behind the mastoid process on the inferior curved line of the occipital bone. Exploration in various directions with blunt probe proved fruitless. Operation did not affect unfavorably the patient or change pulse or temperature, which continued subnormal. Six days later, the coma steadily deepening, another opening was made in the squamous portion of the temporal, and by a grooved director half an ounce of pus was evacuated. In an hour the pulse rose to 100, and the temperature 100.2°. Death took place ten hours after restlessness and continued coma. Post-mortem showed no signs of inflammation at the site of the occipital operation, and an abscess the size of a walnut in the temporo-sphenoidal lobe with well defined walls.

CASE II.—A lady fifty-five years old, seen in consultation; comatose, with history of long-standing otorrhœa; motor control of arms and limbs; heavy, nonstertorous breathing. Slow pulse and low temperature. Symptoms began sixteen days previously with pain and stiffness of right ear and side of head, with drowsiness increasing to present coma. The skull was opened over the inferior curved line, as in Case I., letting out a quantity of pus, with the immediate result of quickening pulse and respiration, dissipating cyanosis of the face, and lessening the coma. Consciousness, however, did not return. Patient died the next day.—*Lancet*, July 3, 1888.

ALCOHOL AND ITS EFFECTS ON THE HUMAN BODY.

BY FREDERICK PETERSON, M.D.

Chenery (E.) Studies on Alcohol.—The relative proportion of alcohol in some of our common beverages is as follows:

WINES.	
Port	19–25 %
Sherry	18–19 %
Claret	12–17 %
Champagne	12–14 %
New Cider	6–7 %
Hard Cider	10½ %
BEERS.	
Boston	4–6.3 %
Ottawa	5 %
Edinburgh Ale	7.5 %
Liverpool	8 %
Rochester	5.6 %
Allsopp's	6 %
Bass'	7 %
STRONGER DRINKS.	
Brandy and Whiskey	48–56 %
Holland Gin	45–49 %
Swedish Gin	50–55 %
Absinthe	72–74 %

Most beverages are more or less adulterated. The color of wines is largely given by fuchsin, cochineal, arsenic, grenat, and various aniline dyes. The color is frequently heightened by the use of lime. Alum and logwood are used for astringency. In 1886, 75,000 gallons of aniline dyes were shipped to California to color wines.

Prof. Mulder tells us that a great deal of port is made in which there is not a drop of port juice, but that it consists of a concoction of gum-benzoin, gum-dragon, red saunders, tartar, tartaric, citric, and oxalic acids, logwood; to which there have recently been added, to give it color and aroma, nitric acid and nitric ether.

It is usual to add common salt to beer to excite thirst. Alum and copperas make the high foam of porter. Brandy frequently contains nitric, sulphuric, and prussic acids, Guiana pepper, fusel oil, and numerous other sophistications.

The popular bitters mostly contain from 18 to 35 per cent. of alcohol. The author deprecates the use of "Beef, Iron, and Wine," because the beef extract as here used has no nourishing qualities, and the iron is almost inert.

It is stated by Baron von Liebig that a five-pound loaf of bread contains as much nourishment as 730 gallons of the best Bavarian beer.

The obesity of drinkers is owing to the prevention of the oxygenation of fat by the alcohol. There is a general fatty infiltration of the tissues. So remarkable is the alteration of the skin thus brought about, that its peculiar velvety feel is diagnostic of the potatory habit.

It is easy to trace alcohol into the blood and to show its presence there, but no one has ever shown that it undergoes any alteration while in the blood. The known facts are all to the contrary. There is a supposition that it takes an atom of oxygen from the blood and becomes aldehyde, and another that it passes at once into water and carbonic acid developing aldehyde and acetic acid on its way. But these are suppositions merely. Alcohol must be rejected from the list of respiratory aliments, because it diminishes the excretion of carbonic acid and depresses bodily heat. Prof. Martin found that an ounce of whiskey or brandy generally increases the frequency of the heart-beat but lessens its force. The kidneys throw off but a very small portion of the alcohol taken into the system. Most of it is excreted by the skin and lungs. The effects of the poison are particularly manifested upon the nervous system, and the most important symptoms are presented by the author in three groups, as follows:

First degree—Excitation of the intellect, abundance and vivacity of ideas, animation of speech, loquacity, agitation, uncouthness of gesture and movement.

A gentle but temporary flush of heat, acceleration of pulse and respiration; with injection and turgescence of the skin of the face, and sometimes sweating.

Second degree—Dulness of intelligence; incoherence in word and thought; irregularity and indecision in the movements.

Perversion of sensibility; imaginary sensations; tingling of the ears and buzzing. Derangement of vision. Feeling of constriction of the forehead.

Incoördination of the movements; indecision and irregularity in muscular contractions; uncertain and trembling walk. Loss of equilibrium.

Redness of face; swelling of jugulars; contraction of the pupils. Fulness of the pulse; irregularity and embarrassment of the respiration and circulation.

Third degree—Complete suspension of intelligence, sensibility, and movements. Torpor of the senses, and involuntary evacuation of urine and feces.

Face pale and haggard; eyes dull and glassy, with pupils permanently dilated.

Pulse small and bad; respiration snoring. Inertia complete.

As a result of this state of things, profound slumber follows, sometimes interrupted by dreams, and attended by a copious sweating. This sleep, which usually continues for many hours, may be prolonged from six to twenty-four and even forty-eight.—*Med. Register*, August, September, and October, 1888.

"Cures" for Inebriety.—An analysis of eleven so-called "cures" for inebriety was made under the supervision of the Massachusetts State Board of Health recently, and the following is the result, the figures showing the percentage of alcohol in each:

Scotch Oats Essence, 35; The "Best" Tonic, 7.65; Carter's Physical Extract, 22; Hoofland's German Tonic, 29.3; Hop Tonic, 7; Howe's Arabian Tonic, 13.2; Jackson's Golden Seal Tonic, 19.6; Liebig Co.'s Cocoa Beef Tonic. 23.2; Mensman's Peptonized Beef Tonic, 16.5; Parker's Tonic, 41.6; Schenck's Sea-Weed Tonic, 19.5.—*Med. Register*, July, 1888.

Alcoholism in Paris.—The French Government is prosecuting researches for the means of suppressing alcoholism. The different alcohols are found to contain furfurol in varying quantities. Absinthe, the

favorite tipple of the French, is manufactured from badly rectified commercial alcohol, made green with sulphate of copper, and saturated with resin. Vermouth is adulterated with hydrochloric and sulphuric acid, to give it a pungent taste. Kirschwasser contains 22 centigrams of prussic acid per litre. Rum is made from beet alcohol, and to it are added ether and formic acid. The bouquets of brandies are obtained by the action of sulphuric acid on castor oil. It is said that crimes have increased in France in proportion to the use of commercial alcohols.—*Paris Cor. of N. Y. Med. Rec.*, Oct. 29, 1887.

Roberts (Sir William) on Alcohol.—In an address before the Medical Society of University College, this speaker argued that nations which use alcohol compare favorably with those that do not, that their achievements are greater, their rate of mortality less.

It is easy to see in the street and in the dissecting-room the bad effects of alcohol, but its virtues as a medicine, drink, or diet are not so palpable, though they may be equally actual. It may ward off disease and offer effectual resistance to its invasion of the body. It may contribute to a bolder, braver, and more powerful national history.—Editorial in *Lancet*, Oct. 29, 1887.

Harley (George) on the Effects of Moderate Drinking on the Heart.—It is next to impossible to over-rate the desirability of impressing patients laboring under heart disease, as well as atheromatous degenerations of the blood-vessels, with the absolute necessity of being extremely temperate in the use of alcoholic stimulants, if they wish either to live long or to ameliorate the disease from which they suffer. Alcohol taken in the form of spirits—brandy, whiskey, gin, or rum—even in teaspoonful doses, by increasing the heart's action has quite as pernicious an effect on the organic structural disease, be its form what it may, as belladonna itself. But in these cases the therapeutic laws are not as unalterable as the laws of the Medes and Persians. This arises from the fact that even the same forms of organic disease affecting the circulatory system occasionally differ very materially in their characters as well as in their course, not only from the special constitutional peculiarity of the patient, but likewise, in a marked degree, from the different circumstances under which he is placed; so that stimulants may be employed in one case as a useful adjunct to other treatment, in spite of their being absolutely forbidden in another. But therapeutical combined with pathological knowledge can alone be entrusted to decide whether or not alcohol can be safely given in any particular case of cardiac disease. In all cases of cardiac syncope, alcohol is a potent heart-reviver. As it is a powerful anti-flatulent, there is scarcely a case of organic heart disease in which it may not be advantageously administered at times in small quantities; for it is an undoubted fact that a stomach distended with wind is a most dangerous complication in heart disease, and sometimes the immediate cause of sudden death.—*Lancet*, March 24, 1888.

Richardson (B. W.) on the Action of Alcohol on the Heart.—Although the primary effect of alcohol is on the nervous system, the first organ to bear witness to that effect is the heart. The pulse requires three days to regain its normal condition after complete intoxication. In the inebriate the heart is never normal in its action. At first it is made tense and full. In continued inebriety this extends to permanent enlargement, dilatation, with stretching of the valves, and distension of the whole arterial system. Then comes modification of structure. The heart is large, dilated, the arteries rigid, the veins bulging. In the major form of inebriety two to six years are necessary to restore the circulatory organs to something of their normal condition.—*Quart. Jour. of Inebriety*, July, 1887.

Owen (I.) on the Connection of Disease with Habits of Intemperance.—The author analyzes 4,234 cases contributed by 178 physicians. The following is a summary of the conclusions drawn from this analysis:

1. That habitual indulgence in alcoholic liquors beyond the most moderate amounts has a distinct tendency to shorten life, the average shortening being roughly proportional to the degree of indulgence.

2. That of men who have passed the age of twenty-five, the strictly temperate, on the average, live at least ten years longer than those who become decidedly intemperate. (We have not in these returns the means of coming to any conclusion as to the relative duration of life of total abstainers and habitually temperate drinkers of alcoholic liquors.)

3. That in the production of cirrhosis and gout, alcoholic excess plays the very marked part which it has long been recognized as doing; and that there is no other disease any thing like so distinctly traceable to the effects of alcoholic liquors.

4. That, cirrhosis and gout apart, the effect of alcoholic liquors is rather to predispose the body toward the attacks of disease generally than to induce any special pathological lesion.

5. That in the etiology of chronic renal disease, alcoholic excess, or the gout which it induces, probably plays a special part.

6. That there is no ground for the belief that alcoholic excess leads in any special manner to the development of malignant disease, and some reason to think that it may delay its production.

7. That in the young, alcoholic liquors seem rather to check than to induce the formation of tubercle; while in the old there is some reason to believe that the effects are reversed.

8. That the tendency to apoplexy is not in any special manner induced by alcohol.

9. That the tendency to bronchitis, unless, perhaps, in the young, is not affected in any special manner by alcoholic excess.

10. That the mortality from pneumonia, and probably that from typhoid fever also, is not especially affected by alcoholic habits.

11. That prostatic enlargement and the tendency to cystitis are not especially induced by alcoholic excess.

12. That total abstinence and habitual temperance augment considerably the chance of a death from old age or natural decay, without special pathological lesion. —Editorial, *Med. Record*, Aug. 18, 1888.

Pupier (Z.) on the Action of Alcohol on the Liver.—This writer publishes a careful research upon this subject in the *Archives de Physiologie*, May 15, 1888, confirming previous observations as to the effect of spirituous liquors upon the liver. It separates the water from the tissues, causing dessication. Nutrition is interfered with and fatty depositions are made similar to the steatosis of atheroma. Later it disintegrates the tissues and promotes the formation of cretaceous masses until the stage of sclerosis is reached. Each form of liquor produces distinctive pathological changes. Absinthe causes typical cirrhosis, and white wines cellular degeneration in particular. — *Am. Jour. Med. Sciences*, July, 1888.

Suckling (C. W.) on Alcoholic Paralysis.—This paralysis was first described by Jackson of Boston, in 1822 and the observation confirmed by Huss of Stockholm, in 1849. Subsequently Wilks of London drew attention to the frequency of paraplegia in inebriates in the *Lancet* in 1873. Lancereaux proved it to be a multiple peripheral neuritis in 1881. Dreschfeld defined two types, alcoholic ataxia and alcoholic paralysis proper. The former resembles locomotor ataxia, exhibiting marked incoordination in the lower extremities, lancinating pains and loss of knee-jerks, without atrophy or paralysis. In all cases presenting such symptoms alcoholism should be excluded before arriving at a diagnosis of tabes. In alcoholic ataxia there is no myosis, Argyll-Robertson pupil, joint affection, or visceral crisis. But there is generally some tenderness in the calf-muscles, and some symptoms pointing to an alcoholic origin, such as morning sickness, dyspepsia, and hematemesis. Occasionally there are qualitative electrical changes. This form occurs chiefly in men.

Alcoholic paralysis proper is the most common form and is more frequent in women than in men. The sensory disturbances are very marked. There is usually bitter complaint of cramps in the calf-muscles, lancinating pains and hyperæsthesia. Sometimes anæsthesia and analgesia follow. The disease usually progresses gradually, but occasionally is acute and attended with fever. Frequently there is implication of the upper as well as of the lower extremities. The exquisite tenderness of the calf-muscles is highly characteristic. There may be both drop ankles and drop wrists. In advanced cases the patient is paralyzed and in bed. The arms suffer later than the legs. The cranial nerves are sometimes affected. There is atrophy, varying with the intensity of the neuritis. The bladder and rectum are rarely implicated. The faradic irritability is normally diminished, and in severe cases entirely abolished. Vasomotor changes are usually present, the extremities being red and sometimes œdematous. Occasionally there are purpuric spots. Mental symptoms are almost invariably presented. The memory is impaired particularly for recent events. The patient is emotional, suffers from insommia, dreams, restlessness, delirium, and hebetude, together with digestive disturbances, such as morning sickness

and retching. Such symptoms occurring with ataxy or paralysis render the diagnosis certain. The author corroborates an observation of Dreschfeld's, that patients though unable to move will often say they have been out walking even an impossible distance. This peculiar delusion is met with in most cases of chronic alcoholism.

The prognosis is usually favorable. If alcohol be not discontinued, the case will terminate fatally. The time of recovery must be reckoned in months.

In the acute stages rest in bed, hot fomentations, and anodyne liniments are advisable. Cocaine may be applied locally or hypodermatically. In later periods rubbing is of particular value, and also the internal administration of iodide of potassium, iron, and strychnia.—*Am. Jour. Med. Sciences*, June, 1888.

Crothers (I. D.) on the Scientific Study of Insane Criminals.—The expert is required simply to examine the phenomena of the mind and its morbid manifestations in any case to which he is called, without regard to the rulings and questions of responsibility held by courts. The heredity and personal history of the inebriate criminal should be first thoroughly studied —the defects, diseases, strength, conduct, and character of the parents, and then the early growth, culture, training, nutrition, surroundings, and occupation of the prisoner himself. Next in order the origin, duration, and character of the drink impulse are most important facts for minute study. Lastly examine into the nature of the crime and the associate circumstances.

Having made one's self familiar with all of these points, the following facts, already established according to the author, are to be used as a basis whereupon to establish a decision as to the prisoner's condition :

1. The inebriety of any person is in itself evidence of more or less mental unsoundness. Alcohol used to excess and to intoxication is always followed by changes of brain circulation and nutrition. Degrees of mental impairment and paralysis always follow whether recognized or not.

2. In a large proportion of cases inebriety is only a symptom of slow, insidious brain disease, particularly general paralysis ; also of many forms of mania, dementia, and other brain degenerations.

Here, notwithstanding all appearances, the inebriate is diseased and unsound mentally.

3. When crime is committed by inebriates, growing out of the inebriety or associated with it, the probability of mental disease and some form of insanity is very strong. Inebriety always favors and prepares the way for the commission of crime.

4. Whenever it appears that persons have used spirits to intoxication for the purpose of committing crime, this is evidence of a most dangerous form of reasoning mania, requiring the most careful study.—*Quart. Jour. of Inebriety*, Jan., 1888.

Lentz (F.) on Alcoholic Heredity.—The author, who is superintendent of a Belgian asylum, states that the laws of neuropathic and psychopathic heredity govern hereditary drunkenness. For this reason it may be mediate or immediate, directly from parents or skipping several generations in descent. He says that the drinker does not transmit the vice of drinking, but the disease of alcoholism. The descendants have varied and complex symptoms of various nervous disorders. Numerous obscurations render it certain that epilepsy occurs under a reflex excitability produced by alcoholic heredity. The same mother with a sober man gives birth to healthy children, and with a drunken man to epileptic children. Another form of alcoholic heredity is seen in hysteroid and neurasthenic states of both men and women. The moral perversions and atrocious crimes often seen in such offspring can only be accounted for by the alcoholic inheritance. From simple mental weakness to absolute idiocy there are many grades of degeneration which can be ascribed to the same origin. Lunier thinks that fifty per cent. of those who exhibit moral imperfections are traceable to alcoholic forefathers. Such persons from youth possess the worst instincts, are cruel, vindictive, quarrelsome. Their delights are in impressing suffering and tormenting others. Usually it is impossible or very difficult to educate them, and the period of puberty signalizes the throwing off of all restraint. Idleness, indecision, vagabondage, moral perversion, restlessness, drink, and venereal impulses are their principal characteristics. They exhibit a wonderful precocity in the development of the drink habit, resulting in alcoholism more dangerous from the fact of previous disposition to degeneration. These subjects usually pass through many jails and prisons before ending in asylums.

Alcohol is worse in its effects on the

physical system than on the moral. The offspring of alcoholic parents are nearly always feeble, badly nourished, deficient in vitality, and an easy prey to disease. The muscular system is but little developed, and growth is imperfect. One of the consequences is unequal development of brain, a general, partial, or unilateral atrophy, accompanied by cranial malformations. There may be microcephalus or hydrocephalus, asymmetry of the skull, and hemiatrophy of the body. Fecundity and birth have been observed to be diminished.—*Quart. Jour. of Inebriety*, April, 1888.

De Zouche (I.) on the Duty of the State with Regard to Inebriates.—This question is discussed at length by the author in a paper read before the New Zealand Institute over a year ago. He defines the terms "inebriates" and "inebriety" as meaning drunkards and drunkenness respectively. But the latter words are so commonly associated with the idea of a *vice*, for which the drunkard merits punishment only, that there is now a tendency to substitute the Latin forms, by which the disease-aspect of drunkenness will be indicated. The term "inebriety" refers more properly to the periodic form of the disease. It is a disease of the nervous system, characterized by periodical fits of depression and restlessness and craving for alcohol. The restlessness and craving begin gradually, attain a certain height—a climax,—and then have a tendency to decline. This is the natural course of the fit, unless treated with alcohol, which protracts the attack indefinitely. The periodicity of the disease alone is sufficient to mark its nervous origin. In this respect it resembles other nervous disorders, such as epilepsy, migraine, spinal irritability, neuralgia, etc. His conclusions are as follows: (1) That inebriety is, in the great majority of cases, a physical disease. (2) That inebriety is curable in a large number of cases. (3) That the committal of inebriate patients to prison is unjust, and morally and physically injurious to them. (4) That patients affected with inebriety can only be treated with any measure of success in special hospitals or retreats, where precautions against their obtaining alcohol could be thoroughly carried out. (5) That it is the duty of the State either to establish or license retreats for inebriates, or to do both.—*Quart. Jour. of Inebriety*, April, 1888.

Kerr (N.) on the Pathology of Inebriety.—This English writer states that it admits of no cavil that there is structural degradation in long-standing habitual inebriety, but whether any tissue changes immediately precede or are synchronous with the narcotic crave and impulse, we have no means as yet of knowing. The exact nature of this physical antecedent or coincident we cannot yet determine, although there is undoubtedly a failing reproduction of that nervous force which is essential to healthy brain life. We may credit the elation to pathological perversion of brain life affecting the vasomotor nerves. This state is unmistakably physical. Probably both the cells of the brain and the cerebral functions are morbidly affected. Pathological states of both depression and exaltation are met with as the proximate cause of outbreaks of inebriety. Acts of drunkenness frequently repeated tend to set up a gradual series of pathological changes, which, in the long run, become crystallized into permanence. The whole circulatory system has been riotous and disorderly. The vessels have been dilated by paralysis of the vasomotor nerves, the action of the heart has been tumultuous, the nervous fluid has been thrown into a state of commotion, cerebral action has been vitiated, and the cell-life of the brain has been rudely disturbed. A persistent succession of such temporarily diseased states of body and brain lays the foundation of permanent alteration of tissue.

The seat of self-control is in the higher nerve centres, and the defective controlling power may be inherited or acquired. Self-indulgent parents who, though never actually intoxicated, have been in the daily habit of drinking freely, have originated or, it may be, have intensified preëxisting, in-born, constitutional, deficient power of self-control, by begetting progeny, all of whom may be more or less wanting in that normal amount of inhibition with which fairly sound human beings are endowed. There are also transmitted perversion of functions and altered structure, an unsound condition of brain and nerve cell, a physical and mental idiosyncrasy, which in some manner, as yet hardly understood, renders the possessor peculiarly liable to be excited to concrete inebriety, peculiarly susceptible to the narcotic influence of alcohol, opium, ether, chloral, chloroform, *et hoc genus omne*. But alcohol is preëminently a

degenerative agent, more so than any of its congeners.

The first stage of alcoholic action is one of exhilaration. The alcohol has paralyzed the vasomotor nerves. The heart beats more frequently from the loss of power in the cardio-inhibitory centre. The higher inhibitory centres are weakened, and the victim becomes garrulous, confiding, easily pleased, and ready to contribute to the pleasure of others. Each act of inebriety still further relaxes self-control. Alcohol is a mighty waster of inhibitory force.

The brain tissue is perhaps the most delicate texture in the human economy, and its functions are the most refined, the most intricate, the most varied, and the most susceptible. Alcohol is a brain poison as subtle as it is powerful. It is especially noxious to the intellectual, volitional, and moral faculties. By its degenerative power, by a long chain of morbid changes, capillary paralysis, circulatory tumult, vascular atheroma, cellular decay, membranous thickening, cerebral congestion, and neuroglian proliferation, alcohol dims the perception, confuses the judgment, paralyzes the will, and deadens the conscience.

Nor is this all. By its destructive action on the stomach, liver, and kidneys, it impairs the digestive and depurative functions. The depravity of the blood, the functional derangements, and the poisoned organism engender morbid impulses and desires which crave the delusive consolation of narcotization.—*Quart. Jour. of Inebriety*, April, 1888.

Crothers (T. D.) on the Punishment of Inebriate Criminals by Death.—The following summary of the belief of Dr. Crothers and some other specialists in this department of psychological medicine are presented as the views of extremists upon this subject:

1. The legal treatment of insanity has changed in obedience to a more accurate knowledge of the brain and its diseases.

2. The legal treatment of inebriety is unchanged to-day. Although it occupies two-thirds of the time of courts, all teachings of science and a broader knowledge of the inebriate and his malady are ignored.

3. The ruinous error of punishment by fines and imprisonment of inebriety and petty crimes associated with it, which notoriously increases and perpetuates the inebriate and criminal, i sa fact demonstrable in every community.

4. Thus public opinion, through mediæval theories and laws, is training and preparing a class of inebriates who first commit petty then capital crime with a certainty which can almost be predicted.

5. The death penalty for such crime utterly fails for the same reason. The execution of any number of this class simply opens the door for an army already prepared and trained to take their places.

6. From a scientific study of these cases it is clearly apparent that they are diseased and incapacitated to act sanely. Alcohol has palsied the brain and made them madmen.

7. To hold such men accountable for their acts, and by punishment expect to deter them from further crime, and by such punishment check others from similar crime, is an error which both scientific teaching and experience point out.

8. The object of the State, through the law, is to protect society and the individual; but if the execution of the law-breaker fails to accomplish this end, the laws are wrong.

9. The unfounded fear that the plea of insanity in crime, and the failure to punish, is an encouragement for further crime, is flatly contradicted by statistics.

10. Among the mentally defective, the insane, and inebriates, the death penalty is followed by an increase rather than a diminution of crime.

11. The inebriate should never be hung for crime committed while under the influence of alcohol.

12. This method of punishment is never deterrent, but furnishes an attraction for other inebriates who commit similar crime in the same way, following some law of mental contagion.

13. The inebriate murderer should be confined the rest of his life in a military workhouse hospital. He should be under the care of others, as incapacitated to enjoy liberty and incompetent to direct his thoughts or acts.

14. A change of public sentiment and law is demanded, and a readjustment of theory and practice is called for.

15. Inebriate murderers should never be placed on public trial, where the details of the crime are made prominent or the farcical questions of sanity are publicly tested. They should be made the subject of private inquiry, and placed quietly in a work-

house hospital, buried away from all knowledge or observation of the world.

16. The contagion of the crime and punishment would thus be avoided, and the inebriates services might repair some of the losses to society.—*Quart. Jour. of Inebriety*, Oct., 1888.

MISCELLANY.

Sudden Death from a Mediastinal Tumor.—In the annual report for 1887 of the Sabbatsberg Hospital, Stockholm, Dr. E. S. Perman details an interesting case of "hemorrhage followed by sudden death, due to the bursting of a vascular mediastinal tumor." An unmarried woman, aged forty-three years, had been in delicate health for a few years. On the morning of July 3d, 1887, she complained of pain in her back. In the afternoon of the same day, while seated at table, she experienced great pain along the left side of her neck, and almost immediately a large tumor formed there. Her respiration at once became difficult, and there was oppression of the chest. Four hours afterwards she came to the hospital and was able to alight from the cab and walk into the receiving-room. Her appearance was markedly cyanotic, and there was oppression of breathing, with sensation of choking. The respiration was very rapid, a condition which did not appear to be altogether due to compression of the trachea. On the left side of the neck there was a tumor extending as far as the middle line, and as large as two fists. On her way to the wards she fainted, the cyanosis increased, and breathing became very difficult. Tracheotomy was immediately performed, but after the introduction of the tube the patient only breathed two or three times, and ten minutes after her arrival at the hospital she was dead. At the necropsy it was found that the tumor of the neck consisted entirely of recently extravasated blood of a dark red color. This extravasation extended under the clavicle and the sternum into the thoracic cavity, as far as the transverse aorta. The blood measured 200 cubic centimetres, the greater part of which was outside the thorax. The trachea, œsophagus, and great vessels of the neck were intact, with the exception of the tracheotomy wound. The extravasation under the sternum had so compressed the great veins of the neck that the jugulars, especially the left one, were distended with blood, but there was no injury to the coats of the vessels. There was no change in the great vessels of the thorax. In the anterior mediastinum, however, between the transverse aorta and the superior vena cava, there was a tumor, the upper part of which had burst, and had evidently given rise to the hemorrhage. This tumor was as large as a medium-sized apple, slightly flattened in front and behind, and appeared to be of the nature of an encephaloid cancer, of a grayish-red color in that part where there had been no hemorrhage. No tumor or abnormality was found in any of the organs, and there was nothing to note about the heart or lungs. In the author's opinion, so much hemorrhage from such a tumor must have been due to the negative pressure produced in the thorax by each inspiration sucking the blood from the tumor, each expiration causing this blood to be forced out of the chest into the neighboring tissues. The sudden death was probably caused by pressure on the heart and great vessels, especially the superior vena cava, as evidenced by the excessive cyanosis, and not by compression of the trachea and lungs.—*Lancet*, Nov. 10, 1888.

BOOK NOTICE.

The Life-Insurance Examiner. A Practical Treatise upon Medical Examinations for Life Insurance. By CHARLES F. STILLMAN, M.S., M.D., Medical Examiner Mutual Life Ins. Co., N. Y. The Spectator Company, New York. 1888. 8vo, pp. 187.

As the author states in the preface, he aims to present a concise practical manual, which will enable even the beginner in life-insurance examinations to conduct an examination satisfactorily to the company by whom he is employed, to the applicant, and to himself. It is very complete as to the duties of the examiner, contains tables of the expectation of life, mortality rates, and percentage of deaths among insured people; a very good chapter on physical diagnosis. The, directions, however as to the examination of the chest are not such as would meet with the approbation of most diagnosticians. The applicant is directed to roll up the shirt and to hold it under the chin. It is impossible to get at the extreme apices of the lungs unless the clothing is removed. This *may* be expeditious and satisfactory to the applicant, but *ought not* to be to the examiner. The third part is on diseases relating to life insurance, and is worth the attention of all medical men. W. V.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of

CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital; CONDICT W. CUTLER, M.D., Instructor in Diseases of the Skin, Post-Graduate Medical School, New York; JOHN S. HAWLEY, M.D., Attending Gynæcologist, New York Hospital, Out-Patient Department; FREDERICK PETERSON, M.D., Lecturer on Nervous Diseases at the New York Polyclinic.

VOL. V., NO. 49. December 6, 1888. WHOLE NO. 97.

CONTENTS.

	PAGE
Therapeutics	581
Medicine and Pathology	583
Diseases of the Nose and Throat	584
Cerebellar Abscess following Otitis Media,	586
A Report on Associated Cerebellar and Aural Disease	586
Occasional Report on Gynæcology	588
Occasional Report on Diseases of Children	590
Occasional Contribution on Surgery	591
Publishers' Notes	592

THERAPEUTICS.

The New Hypnotic Sulphonal.—Attention has already been called[1] to the earlier experiments with this drug.

The claims there and still made for it are that it is a rather insoluble, odorless, tasteless chemical which, when given in from 15- to 60-grain doses to almost any patient, except one suffering from acute pain, will, in from 15 minutes to 2 hours, produce a calm natural sleep lasting from 2 to 10 hours and from which the patient will awake refreshed.

Clinical reports of its effects are still very encouraging.

Its insolubility has caused some annoyance, but it is readily administered in emulsion or in drink or food. Kast has shown that the conditions most favorable to its rapid solution and hence absorption are the presence of abundant liquids with a liberal amount of HCl, salts and peptones. If this is true it would seem as though strong, well seasoned broths or beef tea would be the best vehicles in which to give it. It is asserted that it in no way disturbs the alimentary canal or its functions. Cramer has demonstrated experimentally that it disturbs or influences the action of the saliva, gastric or pancreatic juices. Garnier has seen it cause vomiting and Rabbas, vomiting and diarrhœa each in one case.

The statement that it leaves no unpleasant after-effects will not now pass without challenge. Lovegrove has seen patients, after waking from sulphonal sleep, very drowsy and quite cyanosed. Rosin has noticed a troublesome dizziness follow sleep produced by large doses.

According to almost all observers respiration, pulse, and temperature remain unaffected and no depressing effect on the heart has been noticed. According to the *Therap. Gas.*, Nov., 1888, one of the few cautions as to its use, by Dr. Schmey in the *Therapeutische Monatshefte* for July, 1888, in arterio-sclerosis, seems to have been based on insufficient grounds, for we find that Dr. Müller in the August number of the same journal states that he has used it a number of times in cases of arterio-sclerosis, with far from unfavorable results, he having had most satisfactory success. He refers in detail to the case of a man 72 years of age, who for ten years had been confined to bed with a most depressing dyspnœa as the result of arterio-sclerosis. Digitalis produced transient relief of the dyspnœa, but the patient suffered from almost constant insomnia with, consequently, great reduction in strength. Morphine and chloral produced delirium with great excitement. Dr. Müller gave 15 grains of sulphonal at eight o'clock in the evening, and at eleven o'clock the patient was asleep and slept quietly the entire night, breathing being normal, and remaining so through the following day.

Recent confirmatory evidence of the drug's power and harmlessness are numer-

[1] MEDICAL ANALECTIC, May 10, 1888, p. 229.

ous. Wetherill, in the female department of the Pennsylvania Hospital for the Insane, reports[1] the results of 230 administrations of the drug (gr. xv. doses). In 86 per cent. of the trials from 5½ to 9 hours of continuous sleep ensued, while complete failure ensued in only 10 trials.

In the *Medical News* for September 8, 1888, Dr. L. L. Johnson of Garretsville, Ohio, reports the case of a man of 49, who had suffered from insomnia for 20 years. He had to give up business and could only get 2–3 hours of stupor each night from alcohol. The patient was so desperate as to be suicidal. The first night after 20 grains the man slept eight hours. Immediate improvement in his general condition ensued and business was resumed.

Sachs concludes,[2] from its use in 11 cases, that the drug is valuable in cases of functual (neurasthenic) insomnia; that it is harmless in moderate doses; that it has very slight or no narcotic powers; that in some cases the drug appears to lose its effect if frequently administered.

Wilson and Hutchinson[3] were disappointed in the results of their trials. In a restless, sleepless, noisy terminal dement of 48 even 55 grains had no effect. In a man of 45 with paretic dementia, usually sleepless, restless, and talkative, 20 grains had no effect. In another similar case, not violent or noisy, the usual restless and sleepless nights were not bettered by 30 grains. In a mentally and physically depressed man of 46, in the first stage of locomotor ataxia, 60 grains, in divided doses, gave 2 hours of quiet sleep the first night; 30 grains produced 8 hours sleep the second night, while 30 grains the third night had no effect. They used Merck's preparation. The efficacy, safety, and sphere of usefulness of the drug must still be considered *sub judice*, with the discouraging suspicion that further trial may not sustain its present flattering status.

Huchard on Treatment of Ulcerations of the Alimentary Tract by Iodoform.—For six weeks a phthisical patient had suffered from repeated intestinal hemorrhages. All customary remedies proved useless. The patient was put on iodoform, five or six grains being taken daily in divided doses. On the third day the hemorrhage began to diminish, to cease entirely on the sixth day. The author also attests the beneficial action of iodoform in conjunction with milk diet in the treatment of ulcer of the stomach, another proof, perhaps, of the parasitic and infectious nature of some gastric ulcers as recently claimed by Letulle.[4]—*Le Courrier Méd.*, Sept. 1, 1888.

Luton (A.) on Subacute Mercurialism and its Treatment by Sulphur.—In view of the new danger of mercurialism from the hypodermic employment of mercury, the author has sought to find an antidote to the drug when diffused through the system. Sublimed sulphur, he thinks, does act as an antidote. He mixes sublimed sulphur with five parts of honey, and gives two teaspoonfuls a day on an empty stomach.

He thinks that an insoluble sulphide is formed.—*Union Méd. et Scien. du Nord-Est.*, Oct. 15, 1888.

Harrison (G. B.) on Mullein in the Treatment of Malarial Troubles.—Getting his information at first from lay sources, the author is now convinced that mullein, or verbascum thapsus, has a certain antiperiodic power.

It does not give full directions as to the preparation used, but his lay informant directs: "Beat mullein leaves in an iron mortar; strain the juice and add an equal part of French brandy; in a wine-glass of this mixture put 15 drops of spirits of camphor, and give just as the chill is coming on. The patient must be warmly covered in bed at the time and for several hours afterwards."—*Jour. Amer. Med. Ass'n*, Nov. 10, 1888.

Balfour (J. C.) on the Puncture of a Vein in Hypodermic Medication.—The patient was a woman of 50, who for eight months had been given hypodermics of morphine for acute neuralgic pains in the legs. The dose given on this occasion was a smaller one than usual, equal to one third of a grain, and was injected into the forearm. The injection had been given with the usual caution, and on withdrawing the needle there was no bleeding, although sometimes there was a considerable amount. Almost as soon as it was given the patient called out that there was something wrong, as she felt a prickling, burning sensation all over, and a feeling as if her

[1] *Med. and Surg. Reporter*, Oct. 13, 1888.
[2] *Med. Record*, Oct. 6, 1888.
[3] *Med. and Surg. Reporter*, June 9, 1888.
[4] MEDICAL ANALECTIC, July 19, 1888, p. 341.

head and hands were swollen to such an extent as to burst the skin. When I saw her she was very flushed, the eyes were protruded, and she was greatly distressed. I gave her at once a dose of tincture of belladonna. She quickly became very excited, and inclined to struggle and cry out, till this stage passed off, when she turned extremely pale, and fell back on the bed in an unconscious state; the lips were blue, the skin was very gray, and the face much swollen; the pulse was very weak and fluttering, and the breathing stertorous. Shortly afterwards there was a convulsive movement with arching of the back, and both breathing and pulse became almost imperceptible. A little whiskey was administered by forcing open the clenched teeth, and in a few minutes the stertorous breathing recommenced, and she began very slowly to return to consciousness. Some citrate of caffeine was then given along with some digitalis, as she has a very weak heart. Another dose of the belladonna was shortly administered, and during the rest of the afternoon whiskey and coffee were given in small doses at frequent intervals. She was greatly prostrated, and suffered from intense weakness and very severe headache, which continued for two days. The morphine in this case had none of its usual effect, and no sleep was obtained for over thirty hours.—*Lancet*, Nov. 10, 1888.

MEDICINE AND PATHOLOGY.

The Infectious and Contagious Nature of Tetanus.—All pathologists now agree upon the infectious nature of tetanus, and many cases recently reported point strongly to an equine origin of the disease. As to its contagiousness, many doubts are entertained, but cases are being continually reported which lend probability to that view.

Two of the most recent cases are as follows:[1] Berger relates that his colleague, Nélaton, was called to a case of tetanus, probably of equine origin, upon leaving which he took all ordinary antiseptic precautions except a change of clothing. He at once operated upon another patient, who, on the seventh day, developed tetanus, from which he fortunately recovered after heroic and continued dosing with chloral.

Verneuil relates several similar cases, among which was the following: Two children were playing together when one, through the carelessness of the other, fell, received a slight wound in the face, developed tetanus, and died, attended all through the illness by the other conscience-stricken child. Some months afterwards the remaining child received an injury and in turn died of tetanus. Verneuil thinks that she kept the germs of this affection in her garments, waiting a favorable moment for their development.

Dr. Charles B. Ball, of Dublin, in an article entitled "Tetanus an Infectious Disease," cites[2] a case of his own in which direct or mediate infection apparently occurred. The initial case was that of a boy who was admitted into the children's ward, July 15th, after having sustained a very severe accident from a tramcar—six ribs on the right side were broken; there was a severe lacerated wound of the axilla; the brachial plexus was torn through, and the brachial artery ruptured; gangrene of the arm ensued, and it was amputated through the shoulder-joint, July 19th. Tetanus developed on the 22d, and proved fatal on the 23d.

The second patient was admitted to the same ward, and placed in the adjoining bed on September 5th, for the purpose of having an operation for the radical cure of hernia performed. The operation was done on September 12th; the case ran an aseptic course, so far as suppuration was concerned; the wound was absolutely healed by the 14th day, and all dressings were dispensed with; on the 17th day, however, symptoms of tetanus supervened, and the disease proved fatal five days afterwards. Now, although there was an interval of six weeks between these two cases, it must be remembered that they occupied adjoining beds in the same ward, whereas there had not been a case of tetanus in the hospital for upwards of eight years before. Direct, experimental inoculation from man to animal and from one animal to another has been reported so often as to call for but a passing notice.

Bar on Hemorrhage in the Suprarenal Capsules.—A man was brought to the hospital in an unconscious state in the

[1] *Le Praticien*, Nov. 5, 1886.

[2] *Dublin Med. Jour.*, Dec., 1887.

month of March, 1887. No history of his illness could be obtained.

The deeply comatose state in which he died in 48 hours could not be explained by analysis of the urine, the temperature, ausculation, or the most careful examination. There was no albumen or sugar in the urine, and the respiration was calm and natural. There was no paralysis. There was no suspicion of malarial poisoning, nor was there any pigmentation of the skin.

At the autopsy there was found a slightly increased serosity of the cerebral ventricles and changes in the supra-renal capsules as follows:

The right capsule weighed 22.5 grams (5½ drachms), was the size of a small egg, thickened and soft at its upper and posterior extremity; harder in front and below. The lower border appeared normal. The interior of the capsule on section had a fleshy appearance of a uniform, reddish-gray color. The left capsule weighed 48 grams (12 drachms), was as large as a pullet's egg and showed no trace of normal structure, being hard and white in front, soft and red behind.—*Marseille-Médical*, Oct. 30, 1888.

[In *Virch. Arch.*, Bd. cxiv., Heft 1 (quoted in *Lancet*, Nov. 10, 1888), Von Kahlden reports a case of Addison's disease in which he observed in the right semi-lunar ganglion (corresponding to the diseased capsule) thickening of the cell capsules, scattered peripheral hemorrhages and relics of previous hemorrhages, occlusion of vessels and thickening of the walls by connective tissue; and in the left ganglion a considerable number of recent hemorrhages in the periphery, and a certain amount of thickening around the ganglion cells. Although these anatomical changes suggest the implication of the ganglia as being an essential feature of Addison's disease, the author admits that they do not suffice to attribute to such lesions the cause of the affection. —EDITOR.]

Bouchard and Charrin on Experimental Amyloid Degeneration.—In the course of some experiments a rabbit, previously vaccinated by the hypodermic administration of pyocyanic cultures, was inoculated by the intravenous injection of the bacilli of blue pus April 13, 1887. The animal, thus protected, resisted an amount of the poison which would have killed an unprotected animal in less than 48 hours. Similar injections were repeated in July, October, and December, 1887. Commencing on December 19th, the date of the last injection, the urine became albuminous and remained so up to the time of death, March 14, 1888. Toward the last the albumen became more abundant, the animal lost flesh, and a right, posterior monoplegia developed. Except immediately after an injection, pyocyanine never developed from a culture of the blood or urine of the animal.

An autopsy revealed hard, granular, and waxy kidneys, and a greatly hypertrophied left ventricle, some vessels of which showed amyloid changes.

A second animal was killed three months after it had been inoculated with human tubercular material and cultures of Koch's bacilli. The kidneys were found large, smooth, and yellowish, and, on closer examination, waxy.—*La Tribune Méd.*, Oct. 21, 1888.

[J. McFadyean, *Br. Med. Jour.*, Nov. 10, 1888, says: "Within the past few months I have encountered an instance of very advanced amyloid liver in a turkey, and also a case of the same degeneration in a horse. It is interesting to note that, in both of these cases, the animals were the subject of tuberculosis; but there was neither suppuration nor phthisis, properly so called."—EDITOR.]

DISEASES OF THE NOSE AND THROAT.

BY CHARLES H. KNIGHT, M.D.

Hall (F. de Haviland) on the Use and Abuse of Local Treatment in Diseases of the Upper Air-Passages.—The first indication for local treatment in the nasal and naso-pharyngeal cavities is to remove any obstacle to nasal respiration. The two most frequent causes of mouth-breathing in the young are enlarged tonsils and adenoid vegetations. The latter is best treated by a single operation under chloroform. Foremost among the causes of nasal obstruction come nasal polypi. The use of the galvano-cautery loop, under cocaine in 20 % solution, is advised for these growths. Hypertrophy of mucous membrane may be effectively removed by means of the cold wire snare or galvano-caustic loop. In less severe forms good

results may be obtained by scoring the thickened membrane with the galvano-cautery. There is much unnecessary tinkering with the septum, but under certain conditions it may be desirable to rectify its position or to remove projections from it. In speaking of reflex neuroses, the author refers to the observations of Schech, who has had marked results in treating cases of asthma through the nasal mucous membrane. In a large proportion of cases a nasal lesion was found, and in a majority of them cure or decided benefit followed local treatment. His own experience in asthma, persistent sneezing, and hay fever has been similar. While deprecating excessive zeal in nasal therapeutics, the author thinks that at least one disease, ozæna, used in its proper sense as a synonym for atrophic rhinitis, deserves the most careful attention. A cure cannot be effected, but a great degree of comfort may be assured the patient by thorough cleansing of the nostrils, followed by the use of insufflations of iodoform, or iodol, or Gottstein's tampon. One form of neglect of local treatment supplies the specialist with many patients, namely, disregard of the naso-pharynx and adjacent passages during the course of the exanthemata and other acute affections. A large number of the cases of deafness due to otitis media might have been prevented.

The pathological changes in the posterior wall of the pharynx will not yield to local treatment until nasal obstruction has been removed, or until a gastric or a constitutional derangement has been relieved.

Nervous pharyngeal cough is not influenced by local treatment. A sea voyage is the only remedy.

Many cases of laryngitis are due solely to nasal obstruction, which must first be removed. Astringents should never be used during the acute stage. Soothing inhalations and physiological rest, not only to the phonatory but also to the respiratory function as far as possible, are indicated. The author refers briefly to laryngeal neoplasms and their treatment, and to the management of adhesion of the vocal cords in syphilis.

In speaking of laryngeal phthisis, while not denying that ulcers of the larynx may heal under proper local treatment, he condemns scarification of the larynx, the recent proposition made by Massei to extirpate, and the plan, formerly advocated by Robinson, to perform tracheotomy, even in the absence of obstruction. Finally attention is drawn to the value of cocaine in relieving dysphagia.

George Stoker contributes a paper on the same subject, in which he cites as an instance of abuse, insufflations in laryngeal phthisis before cleansing with detergent sprays.

The objections are that the powder does not reach the diseased surface, and, moreover, most of it is at once expelled from an irritable larynx by the act of coughing. This procedure is recommended in syphilitic ulcerations, and in cancer of the larynx. (Why these objections do not hold good here also is not apparent.)

The destruction of the *veins* by the galvano-cautery in follicular pharyngitis, the galvano-cautery snare in removing nasal polypi, with failure to cauterize the stumps as the sloughs separate, and the use of the galvano-cautery for the purpose of removing enlarged tonsils are condemned.—*Brit. Med. Jour.*, Sept. 15, 1888.

Knight (C. H.) on Congenital Bony Occlusion of the Posterior Nares.—This rare anomaly may result from : (1) exostosis, or simple hypertrophy of the osseous structure by the turbinated body, middle or inferior ; (2) a ridge, or exostosis, springing from the vomer ; (3) an adventitious plate of bone developed from the floor, or the outer wall, of the nasal cavity. After reviewing the literature of the subject, the author gives the history of a case of his own. The malformation involved only the right posterior naris, and was apparently due to extension and bending upwards of the horizontal plate of the palate bone, a condition which has been especially described by Luschka. There was a remarkable absence of subjective symptoms. There was impairment of hearing in the right ear, and of course the olfactory sense, if present, was not employed on the right side. The obstruction was overcome by means of the electric nasal trephine to such a degree as to permit nasal breathing and to improve the sense of smell. There was no change in the hearing power after the operation, and the patient was more or less annoyed by accumulation of secretion. In conclusion reference is made to the difficulty of keeping open the newly made nasal tract, and a more thorough operation, under a general anæsthetic, if necessary, is advocated. Attention is directed to the

value of the information gained by digital examination in cases of this kind.—*The Medical News*, Nov. 10, 1888.

CEREBELLAR ABSCESS FOLLOWING OTITIS MEDIA.[1]

BY A. T. MUZZY, M.D.

A boy 17 years old entered Christ Hospital, May 12, 1888, in deep coma, with profuse discharge from left ear. Had had a chronic purulent otitis for 8 years. Two weeks ago a fresh attack of intense headache, pain, suppression of discharge and constipation set in. The boy had been bright and intelligent. The headache steadily increased in spite of treatment. Constipation yielded to strong measures, and the discharge reappeared. On admission he lay on his right side in a position of complete flexion. There was pus in left auditory meatus and in mouth. Coma can be broken by loud voice and gentle shake, when he answers slowly but rationally. Complains of pain in the left side of the head, especially on percussion over temporal and lower parietal region. Pupils were contracted, temperature was generally normal, occasionally subnormal. A few clonic convulsions were noticed.

On the 17th, from history and symptoms decided to try trephining of squamous portion of temporal and explore for abscess. With usual antiseptic precautions a crucial incision was made and a button of bone ½ in. diameter removed, 1¼ in. above and 1 in. behind external auditory meatus. Dura mater pulsated slightly, otherwise normal. A long fine hollow needle was introduced three times. The first time it struck the 3d ventricle, discharging considerable of the ventricular fluid; the 2d time, the perforation was more perpendicular; and 3d time it was directed backwards but no pus or gas was detected. The patient presented the same condition afterwards as before, saving that two days after he was for 6 or 8 hours quite rational, conversing with the attendants. Wound healed very favorably but his general condition steadily grew worse. He had a number of clonic convulsions, and for short periods got very restless and noisy. Constipation yielded to nothing while in hospital. Discharge from ear diminished after operation. Temperature rose for 3 or 4 hours after operation, but fell to normal until death. Drank milk in good quantity until the day of death, when there was some difficulty. Finally, died about noon May 24th, seven days after operation. Post-mortem the day following revealed a destruction of dura mater about the size of a three-cent piece over posterior surface of petrous portion, temporal bone, about entrance of internal auditory meatus. The left anterior lobe of the cerebellum was nearly destroyed by an abscess the size of a large egg, with ragged, irregular walls, the pus being mixed with shreds of brain tissue. The odor of the pus not so offensive as is usual with abscesses of this nature and cause. The body was greatly emaciated. This case would seem to conflict with the present accepted range of symptoms indicative of cerebral and cerebellar abscess.

In reporting this personal observation it occurred to me that a *resumé* of recently reported similar cases would be interesting, and they are appended herewith.

[1] Original article.

A REPORT ON ASSOCIATED CEREBELLAR AND AURAL DISEASE.

BY A. T. MUZZY, M.D.

Bressler (F. C.) on Abscess of the Cerebellum Following Suppurative Otitis Media.—A boy 19 years old, had had a mastoid abscess lanced one year ago. and a chronic otorrhœa since infancy. Complains of pain over the mastoid of left side, deafness, hearing watch only on contact; temperature is normal, but the bowels are constipated. Local treatment does not control the pain. Four days after first seen the abscess over the mastoid was lanced and a drachm of pus evacuated. Frontal headache became now very marked with sordes and loss of appetite. On the seventh day there was muscular spasm on left side of neck which prevented opening of mouth. There was some facial paresis of left side, temperature now 101°, pupil left eye dilated, and the eye cannot be rotated outwards. Until death on Feb. 6th, the constipation continued, the temperature was never high. He could always answer rationally and complained of intense pain over the cervical and upper dorsal vertebræ.

Finally, after 24 hours of coma, death took place without convulsions having occurred,

and with no marked paralysis of any part of the body. At the autopsy a large abscess was discovered in the left lateral lobe of the cerebellum communicating by a sinus with the posterior surface of the petrous portion of the temporal bone, which was eroded by the inflammatory process. Those were thrombi of the left lateral sinus and internal jugular vein, which were organized.—*Med. Times*, Aug. 1, 1888.

Smith (T. C.) on Abscess of the Cerebellum Caused by Disease of the Ear.—A colored girl 15 years old had been suffering since an attack of measles in infancy, with otorrhœa and deafness. Headaches were frequent. At present, August, 1887, there was severe constipation, fever and slow pulse, with convulsions at night. Conditions varied but little until September 15th, when coma came on, soon followed by death. Post-mortem showed adhesion of dura mater to posterior surface petrous portion temporal bone about the meatus auditorius internus. The bone at this point was necrosed. The Cerebrum was normal. The left hemisphere of the cerebellum was converted into an abscess.—*Jour. Am. Med. Ass'n*, Feb. 18, 1888.

Thompson (J. H.) on a Case of Otitis Interna and Cerebellar Abscess; Skull Trephined and Abscess Opened; Necropsy.—The patient was a boy of eleven. Six months before he had variola, followed by deafness in the left and otorrhœa of the right ear. On entry, otorrhœa existed in both ears, with destruction of the drums and fungoid growths of the middle ear. Symptoms, developed after entry, led to diagnosis of cranial abscess of the left side. First a disk of bone one and one half inches in diameter was removed from a point two inches above and one inch behind the external auditory meatus. But explorations in various directions by trocar and canula were fruitless. A button of bone was then removed by gouge, half an inch above the left superior curved line, one and one half inches from the median line, and one inch above the occipital protuberance. A trocar and canula passed through the occipital lobe and the tentorium into the cerebellum gave exit to a drachm of thin fetid pus. The canula was left in position for drainage. The child died eight hours after without special symptom, save a temperature at death of 106.6° F. *Necropsy:* Petrous portion of the temporal was extensively diseased; a sinus led from here between dura and temporo-sphenoidal lobe to cerebellum, where there was a large abscess occupying the posterior, inferior, and inner portion. Some hemorrhage was also found at the base of the brain.—*Lancet.* Aug. 4, 1888.

Green (J. O.) on a Case of Abscess of the Cerebellum from Ear Disease.—The patient, the son of parents both insane, was kicked by a horse in the right temporal region fifteen years ago. Some symptoms of brain concussion were speedily recovered from. Ever since the accident, has had moderately profuse otorrhœa, without pain or swelling. For five months before being seen, has complained much of right temporal region; and for a few days since has had paresis of the right facial nerve, which lasted only four days. With the paresis there was daily vomiting, without apparent cause; appetite poor, but intellect clear, and bowels free. On examination, the external canal was found filled with polypoid growths. After their removal, rough carious bone was detected in posterior and upper part of the tympanum. Headache and vomiting ceased for two days after removal of the growths. Tuning-fork on the vertex was heard wholly in affected ear. There was no tenderness over the mastoid. Headache and occasional vomiting returned. Slight delirium was shown twice. When questioned, always said he felt "first-rate." From entering hospital until death, lay quietly on either side, with head covered by the bed-clothes, in slightly somnolent condition, from which he was easily aroused. He immediately experienced headache on sitting up, and if he continued sitting, vomiting resulted. There was some sluggishness in the movement of the right pupil, and during the last week of life obstinate constipation. Pain was always referred by patient over the general temporo-parietal region of the right side. Temperature was normal throughout. Pulse varied from 52 to 85, and the most continuous pain and frequent vomiting occurred on those days when the pulse was lowest.

At the autopsy, body appeared small and emaciated; convolutions of the brain markedly flattened; pia dry; dura, for a spot size of a five-cent piece about the foramen of the seventh nerve, was thickened and yellow, and adherent to the pia of right half of the cerebellum. In the cere-

bellum, corresponding with this region, was an abscess the size of an English walnut, with smooth walls and filled with greenish offensive pus. The remainder of the brain was unaffected. The mastoid cells were eroded into a common cavity containing a grayish cheesy material of foul odor. The petrous portion of the temporal about the entrance of the seventh nerve, just described, was carious and necrosed.—*Boston Med. and Surg. Jour.*, May 31, 1888.

Hulke (J. W.) on Trephining for Evacuation of Intra-Cranial Abscess Occurring in Connection with Suppurations in the Ear.—A baker of 45, was admitted October, 1885, to the Middlesex Hospital complaining of severe pain of left side of the head, most intense in occiput. Immediately above the pinna was an especially tender spot, with some tenderness generally, over the mastoid region. There was a fetid otorrhœa of this side. Watch : L. ear, o. Slight left facial paralysis. Mastication caused such pain in temporo-maxillary joint as to prevent eating. Some otorrhœa of right ear also. *History:* Had had constant otorrhœa of right ear, and occasional from left, since childhood. Twenty years before, a polypus had been removed from the left ear, and another six years later. Three weeks ago pain commenced in left ear, soon followed by pain in the back of the head. This was accompanied by vomiting at first. Otorrhœa continued, occasionally tinged with blood, through this stage. From admission the patient's condition steadily grew worse. Only once did the temperature reach 100° F. For two days it was subnormal, with pulse slow. One week after admission, taking the localized pain of temporal region for a guide, the skull was trephined one centimetre above ext. aud. meat. of left side. A blunt director passed as far as tegmen tympani failed to find a pus cavity. Coma deepened, death taking place next day. *Post-mortem:* No marks of inflammation about the part trephined. In the anterior surface of the left cerebellar hemisphere was an abscess the size of a walnut, in contact with an erosion of the dura mater, covering a carious spot of the temporal bone. The abscess walls were smooth and fairly well defined. This hemisphere of cerebellum was swollen, compressing pons and medulla. There were no other marked changes in the brain.—*Lancet*, July 3, 1886.

OCCASIONAL REPORT ON GYNÆCOLOGY.

BY JOHN S. HAWLEY, M.D.

Haines (W. D.) on the Treatment of Gonorrhœa in the Female.—Seventeen cases—of which five were primary, two in a second attack, six in a third, and the remainder those of patients who had so frequently been affected that they could not remember the number of attacks,—were subjected to the following treatment: The vagina was first cleansed by means of a copious douche of a strongly alkaline solution at a temperature of 43° C. to 46° C., with the view of removing as much of the vaginal epithelium as possible, and of relieving hyperæsthesia of the parts. Then, by means of a Ferguson's speculum, a cotton tampon saturated with boro-glyceride was placed in contact with the cervix, and the vagina was entirely filled with crystals of boric acid, the speculum being gradually withdrawn as this is done. Excoriations about the vulva are to be treated by a dressing of lint soaked in boro-glyceride, and a T bandage applied. The dressing was left for thirty-six hours, then removed, a douche of solution of bichloride of mercury (1 to 1,000) administered, and the boric acid dressing again applied after eight or ten hours. The majority of the patients were cured after four applications, and in all the cases the discharge disappeared in from nine to fifteen days. Treatment in all was adopted in from four to twenty-four hours after the appearance of the discharge.—*Cincin. Lancet-Clinic*, Oct. 27, 1888.

Townshend (A. B.) on the Immediate Repair of Lacerations of the Cervix and Perinæum.—As quickly as may be after the delivery, a careful examination should be made of the margin of the os by the finger, by which means one can easily locate and estimate the extent of any laceration or lacerations. Especially is this measure to be employed when there is hemorrhage not to be explained by other conditions, as it is possible that a blood-vessel of a size sufficient to cause a serious loss of blood has been torn across, and the time spent in endeavoring to excite uterine contraction is wasted. This most frequently is the case when an old cicatrix has been torn, and the ends of the divided vessel cannot contract in the hardened

tissue. Pressure with the finger at the base of the tear, if possible from the inside against some firm portion of the pelvis, will often stop the bleeding; and, if once stopped, the hemorrhage seldom recurs. If hemorrhage is persistent, and the uterus is found to be well contracted, the evidence is strong that the source of the bleeding is a ruptured vessel in the cervix, and an examination with the speculum should be made. A suture of silk, silver wire, or catgut passed, as in trachelorrhaphy, just above the angle of the laceration, will arrest the hemorrhage if the vessel be of large size, while the use of a firm tampon will check that which proceeds from general oozing or from small vessels.

That the operation of trachelorrhaphy should not be performed immediately in cases uncomplicated by hemorrhage seems plain, for the following reasons:

1. Union of the bruised and hypertrophied tissues can scarcely be expected to follow the primary operation, while such is the rule after the secondary operation.

2. Sloughing of the cervical tissues often follows lacerations, as a result of long-continued pressure, and the suturing of such a wound would result in a condition worse than if left to nature.

3. The labors in which lacerations of the cervix occur are ordinarily severe, subjecting the patient to a considerable strain. Any addition to this strain by operative measures not absolutely demanded, and by prolonging the anæsthesia, which will be almost always required—for the vagina is too sensitive to bear the pressure of the speculum,—should be avoided as much as possible.

4. What seem to be extensive tears immediately after labor, often become insignificant after involution takes place, or will be found to have become united after a few weeks.

Immediate trachelorrhaphy, then, should be confined to cases in which serious hemorrhage is the result of laceration of the cervix.

In the treatment of lacerations of the perinæum, however, the primary operation is almost always indicated. Simple lacerations of the mucous membrane of the vagina or the fourchette will usually heal spontaneously if the wound be kept clean. In lacerations involving the separation of the fascia, or muscles of the so-called perineal body, the operation is indicated, as the tear is usually clean; the parts have not been subjected to pressure for a sufficient length of time to cause sloughing; the operation is easily and quickly done, and the results are excellent. Moreover, it renders septic infection less probable, as it covers a large raw surface at a point especially exposed to such danger. Lacerations through the recto-vaginal septum and sphincter ani imperatively demand the primary operation, except in cases in which the life of the patient is in immediate danger.

The restoration of a complete laceration of the perinæum is a comparatively simple operation, when performed within forty-eight hours of the time at which it occurred; but at a period remote from this time, the operation is not only a most difficult one, but its results are not satisfactory. The reason is that the separated ends of the sphincter ani soon retract, and its fibres become atrophied, making it a matter of extreme difficulty to secure perfect coaptation and primary union of its widely separated extremities. This is easily done at the time of the injury, and neglect to attempt so to do is deserving of the severest censure.

By immediate operation is not meant that done at the end of labor, but within a period of time prior to that at which fresh denudation of the torn surfaces is required. Indeed, unless the tissues are but slightly injured and the patient under the influence of an anæsthetic, it is best to delay the operation for from twenty-four to forty-eight hours after labor. The tissues are usually swollen and œdematous, and the extent of the injury is much exaggerated on this account. The subsidence of the swelling would tend to make the sutures too loose, and imperil the success of the operation done at the close of labor. This œdema will usually have disappeared by the end of twenty-four to forty-eight hours, and then the extent of the injury may be accurately determined and the sutures applied with the necessary degree of tension. If for any reason the operation be postponed until granulation of the torn surfaces has taken place, these should be lightly scraped, and the cicatrizing edges be denuded with the scissors. Silk, catgut, or wire are to be used in suturing the lacerations of the lesser degrees, but in those involving the sphincter ani and rectal wall, the wound in the gut should be closed by interrupted sutures of catgut introduced

from the rectal side, and knotted inside the gut until the tear is closed from above down to the anus. The laceration in the vagina and that of the sphincter are thus closed in the usual manner.

The important point in the after-treatment is to move the bowels early and often. A small enema of olive oil is to be given on the day after operation, and allowed to remain in the bowel, repeating it daily, while some mild cathartic is to be given in small doses, so as to keep the stools in a liquid condition. Vaginal douches of hot carbolized water twice or thrice daily, are to be given, and the diet should be fluid and light.—*N. Y. Med. Jour.*, Sept. 8, 1888.

Sims (H. M.) on the Importance of the Microscope in the Treatment of Sterility.—The following queries must be settled by the physician in order to work intelligently in the treatment of sterility in women :

1. Is the male competent to perform the sexual act? 2. Is the female competent to perform the sexual act? 3. Are the zoösperms healthy? 4. Is the ovum healthy? 5. Is the cervical mucous healthy? 6. Does some morbid condition prevent the zoösperms from coming in contact with the ovum? The cause of the failure to conceive may be attributed to the female, if the male is competent to perform the sexual act, and the microscope determines that the zoösperms are healthy.

Fructification probably takes place in the tubes, as the zoösperms quickly enter the tubes after once in the uterus. Zoösperms have been found in the tubes a few hours after copulation. An obstruction in the tubes would, therefore, prevent fructification. The obstruction may be due to inflammations or other morbid processes—conditions difficult to diagnose and treat.

The most frequent causes of sterility in women are found in the uterus, and are : Permanent deviations, flexions, versions, lacerations of cervix, disease of cervix, and occluded or abnormally small external os. Disease of the cervical canal, or poisonous discharges from the uterus or tubes will produce an unhealthy cervical mucus, which will destroy the zoösperms, and a very small *os tincæ* will act as a barrier to the zoösperms. In the latter case, the condition may be accurately determined by introducing a small glass tube into the uterus, and examining the discharge, to see if the zoösperms have entered the uterine cavity. The tube may also be used to collect the cervical mucus. The secretions should be examined in all cases of sterility ; in some of the most unpromising cases, the microscope will, by accurately determining the condition, direct a favorable treatment.

In treating sterility, the one thing to be borne in mind is the removal of the cause. Malpositions of the uterus should be corrected, lacerations should be sewed, and inflammatory and other diseases cured. A woman who has been cured of sterility may conceive as late as the fifty-fifth or sixtieth year of life.—*Am. Jour. Obstet. and Dis. of Women and Children*, October, 1888.

OCCASIONAL REPORT ON DISEASES OF CHILDREN.

BY ELIZABETH STOW BROWN, M.D.

Meningocele.—Dr. McNutt presented[1] to the Clinical Society of the Post-Graduate Medical School a case of meningocele. The tumor occupied the lower part of the occipital region ; it was pedunculated, and there was no opening into the spinal canal. From birth to death, three weeks, the circumference increased from eight inches to eleven and three quarter inches. The tumor was translucent in its upper part, but the lower portion was covered by tissue like the scalp, presenting a growth of hair. The bones of the skull were very soft, almost like membrane ; the fontanelles large and the sutures open. There was also deformity of the hands and feet, paralysis of the left side of the face, luxation of the shoulder joints and tenseness of the pectorals. The hand was flexed, the fingers normal, excepting luxation of the thumb on the left side. The metacarpal bone was apparently absent. There was also talipes calcaneum, and pigeon-breast.

Dr. Herbert of Louisiana, in some remarks and suggestions on *meningocele*, reports[2] a case in which the child presented a tumor on the left side, just behind the ramus of the lower jaw, on a line beneath the lobe of the ear, and as large in appearance as a small hen's egg. When pressure was applied to this tumor and its contents

[1] *Jour. Post-Grad. Med. Soc.*, Jan., 1888.
[2] *New Orleans Med. and Surg. Jour.*, Aug., 1887.

returned to the arachnoid cavity, the pupils opened widely, and the face of the child and its cries expressed discomfort and suffering. The tumor continued to grow; and by the time the child was five months old, it was producing severe symptoms of pressure. Evacuation of the fluid procured relief, but the tumor filled up again and again. Gradually the sac of the meningocele became obliterated, but in the meantime a suppurating adenitis had started in the neck. One after another the glands of the neck broke down, until the child died of exhaustion at the age of six and one half months, two weeks after a complete obliteration of the meningocele.

Mr. J. H. Morgan at a recent meeting of the Medical Society of London [1] showed a child, aged sixteen months, with a meningocele at the base of the nose. The girl was the first child, was quite healthy, and in all other respects was well formed. The tumor was observed at birth, and it at first increased out of proportion to the growth of the child. At twelve days of age it was taken to Mr. Makins, who on several occasions evacuated cerebro-spinal fluid with a fine trocar, and on nine different occasions injected small quantities (from five to fifteen minims) of Morton's solution. No bad effects followed, but there was no marked diminution of the tumor. The child now presented a smooth swelling, commencing at the middle of the forehead and running down to the middle of the nose, where it expanded towards the inner angle of each eye. The skin over all was natural in color. At the upper part was a bony prominence, which terminated at the base of the nose in a sharp uneven edge, which could be traced along the lateral margins. The soft part of the swelling which protruded between them was reducible, and pulsated synchronously with the brain. No further treatment had been attempted.

The *Weekly Medical Review* editorially says [2]: "It should be specially gratifying to the profession to read of such cases as the one reported by Dr. W. O. Roberts, of Louisville, Ky., at the McDowell Medical Society meeting, Nov. 1.

"Immediately after the birth of a child a tumor half the size of a goose-egg was noticed just below the external occipital protuberance. It was exquisitely sensitive, the slightest touch causing the child to cry violently, distending the tumor. On this account the child could not lie upon its back. The tumor grew larger and at the end of four weeks it had doubled its original size.

"At this time Dr. Roberts had the child placed under chloroform, and he made an elliptical incision through skin and fascia around the neck of the tumor, which he carefully dissected from the surrounding tissue, and then transfixed it with stout silk ligatures, tying both ways close to the skull. The tumor was removed and found to contain two ounces of serous fluid slightly tinged with blood. The opening in the cranium was one inch in length vertically and ½ inch horizontally. The wound was dressed antiseptically, provision being made for drainage. The little patient recovered with no unfavorable symptoms, and was taken from the infirmary on the tenth day, the wound having healed perfectly. The deep silk ligatures did not come away.

"Five months later the child was perfectly well and there was no evidence of a return of the growth or of hydrocephalus. Dr. Roberts called attention to the fact that the death rate following extirpation in these cases was very great. He advises that the operation be done early."

[1] *Lancet*, Nov. 3, 1888.
[2] November 10, 1888.

OCCASIONAL CONTRIBUTION ON SURGERY

Archer (L.) on Tolerance to Foreign Bodies in the Tissues.—On Friday, October 26th, a young lady consulted me in consequence of a painful swelling over the carpo-metacarpal joint of the little finger. On examination, I found that there was a small abscess in that situation, just pointing. I proceeded to open it, but felt the knife grate upon some hard substance as I cut down. Thinking there was a piece of dead bone, I carefully introduced the forceps, and extracted a rough fragment of white marble about the size of a small bean. The patient could give me no explanation of its presence, but, on inquiring of her mother, she stated that when at school fourteen years ago she fell on a newly made asphalt path, and cut her hand severely. It was washed and strapped up, and healed without trouble. She felt no further effect from the injury until a

week before I saw her, when she struck her hand against the table, and to that accident she attributed the formation of the abscess. The fragment was lodged deep down, just above the joint, and had apparently lain there quite innocuously until the blow started fresh inflammatory action. —*Lancet*, Nov. 10, 1888.

Green (F. W. E.) on a Case of Scirrhous Cancer of the Male Breast.[1] —On Dec. 2d, a blacksmith, æt. 55, complained of a painful lump in the left breast. He had had a small hard lump in his left breast for fourteen years. It was about the size of a small marble, and remained this size till three months previous to his admission, the only trouble he had with it at that time being occasional darting pains. At a period about three months previous to his admission the tumor commenced to increase in size, and became more painful. Shortly after this he found that the tumor had become adherent to the skin. He first noticed that the axillary lymphatic glands were enlarged about eight or nine days previous to his admission. He has been much troubled with darting pains during the last three months. The pains were worse at night.

On examination a band of skin just external to the areola of the left nipple was found to be reddish and shiny. The band of skin was one inch long by half an inch broad, the long diameter being horizontal. Just external to the areola, beneath the above-mentioned skin, was an indistinctly circumscribed tumor. It was almost circular in shape, about two inches in diameter, tender, and very hard. It was adherent to the skin, but movable in the deeper tissues. The nipple and areola were normal in character.

There was a mass of enlarged lymphatic glands in the axilla, but the lymphatic glands of the neck did not appear to be affected.

His other breast presented the usual characters of the male organ. His other organs were healthy and his urine normal.

The tumor, affected skin, and axillary lymphatic glands were removed Dec. 8th. Section of the tumor after removal presented the usual appearances of scirrhous carcinoma.

On the 29th the wound was quite healed. Discharged.

One month later the cicatrix was normal and harder than it was.—*Med. Press*, Oct. 31, 1888.

[1] See MEDICAL ANALECTIC, Nov. 8, 1888, p. 538.

PUBLISHERS' NOTES.

The solubility of COATED PILLS is a matter of very great importance to the physician who may desire to prescribe those of quinine, and other medicines offensive to the taste and smell. Various experiments from different sources have demonstrated the fact that Sugar-Coated Pills prepared by Wm. R. Warner & Co. are the most soluble and reliable in this respect. Those containing quinine are made of good material and full strength, as demonstrated by chemical analyses. These facts were established by Leroy M. Yale, M.D., of New York, and A. B. Lyons, Analytical Chemist, Detroit, and others. And the well-known reputation of the house is a sufficient guarantee.—*Southern Medical Record.*

Hysteria and Brain Tumor.—This interesting work, which has been published recently, has been endorsed by the medical press as follows:

"It puts into the hand of the busy practitioner fruit that has required years to develop. The subjects treated of are all extremely interesting."—*Indiana Medical Journal.*

"A collection of valuable essays."—*Medical Press of Western New York.*

"An invaluable counsellor."—*N. E. Medical Gazette.*

Order from your bookseller or direct from the publishers, G. P. Putnam's Sons, New York. Price, $2.00, postage prepaid.

Papine.—Dr. Charles H. Merz, the house physician to University Hospital at Cleveland, Ohio, April 25th, 1887, said: "I have made use of PAPINE for some time past, both in hospital and private practice, and find it a most agreeable substitute for Morphine and Opium. It is the anodyne *par excellence.*

Lactated Food.—

WELLS, RICHARDSON, & CO.:

Gentlemen—I have used your Lactated Food extensively in hospital practice, and I have only praise for its usefulness. In the acute intestinal lesions of children, given alone or in combination, it has rendered me great service. I have given it for weeks to children brought here half starved and weak, and have seen them pick up rapidly. In wasting diseases of suppurative type it has sustained life when other foods could not be borne. It is a splendid food for typhoids, but its use extends to adults, where it is of great service in chronic diarrhœa, delirium tremens, carcinoma of stomach, etc. In the lying-in wards it is now a daily want, and many babies have been brought up on it without the breast. Given with lime water it corrects acidity and flatulence and checks diarrhœa. Changing from other foods to this has in most cases proved beneficial in the children's ward. I consider it a valuable preparation, and now use it in private practice. I cannot do without it in the summer months.

Very truly,

E. E. BABCOCK, M.D.

Formerly House Surgeon and Physician, Cook County Hospital, Chicago, Ill.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of

CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital; CONDICT W. CUTLER, M.D., Instructor in Diseases of the Skin, Post-Graduate Medical School, New York; JOHN S. HAWLEY, M.D., Attending Gynæcologist, New York Hospital, Out-Patient Department; FREDERICK PETERSON, M.D., Lecturer on Nervous Diseases at the New York Polyclinic.

VOL. V., NO. 50. December 13, 1888. WHOLE NO. 98.

CONTENTS.

	PAGE
Occasional Report on Nervous Diseases of Children	593
Occasional Report on Diseases of the Nose, Mouth, and Throat	595
Occasional Report on Diseases of Women	599
Miscellany	601

OCCASIONAL REPORT ON NERVOUS DISEASES OF CHILDREN.

BY ELIZABETH STOW BROWN, M.D.

Cerebral Palsies of Children.—Dr. Wm. Osler, of Philadelphia, in five clinical lectures,[1] has recently given a most exhaustive review of the literature of this subject, as well as the presentation of a very large number of valuable cases. Of infantile hemiplegia, 120 cases are analyzed; of infantile spastic hemiplegia, 19 cases; and of paraplegia, 11. The author has analyzed the records of 90 autopsies in cases of hemiplegia coming on in infancy or childhood. The lesions are grouped under three headings:

1. Embolism, thrombosis, and hemorrhage.

2. Atrophy and sclerosis.

3. Porencephalus, representing a loss of substance in the form of cavities or cysts, situated at the surface of the brain, either opening into or bounded by the arachnoid, and after passing deeply into the hemisphere reaching even to the ventricle. This condition usually corresponds with definite areas of vascular distribution. In the great majority of cases it occupies the districts supplied by the middle cerebral arteries.

Of bilateral spastic hemiplegia, reports of sixteen autopsies have been collected and analyzed. Destruction of the motor centres of the cortex is the essential lesion in bilateral spastic hemiplegia. Diffuse atrophic sclerosis is the most common condition; a patchy sclerosis has been found in some cases; porencephalia in others; while in one case there seemed to have been arrest of development. Descending degeneration was noted in several cases.

Dr. Lovett, of Boston, reports[2] a series of sixty cases of cerebral paralysis in children. This author groups his cases into three classes: hemiplegia, spastic paralysis of both limbs, and a class of nondescript cases called incoördination, or idiocy. Among these sixty cases, twenty-six were of hemiplegia, half of the right side and half of the left, and about equally divided between the two sexes, ranging in age from a year and a half to fourteen years. Two-thirds of these cases were hemiplegia of practically the adult type of distribution; while the remainder represented a combination of hemiplegia, and beginning or advanced spastic paralysis of both legs as well. The discussion of the etiology of these cases showed that they were not connected with such a universal difficulty of labor as previous authors had observed. An illness marked the onset of the disease almost always.

Of the sixteen cases of bilateral spastic paralysis in the sixty, the age of the patients ranged from two to twelve years. The etiology included abnormality of labor, severe crying spell immediately after birth (suggesting the occurrence of meningeal hemorrhage); traumatism, a fall; acute sickness of some sort, and congenital syphilis. The author discusses the question as to whether spastic paralysis in children is a spinal or cerebral affection, citing

[1] *Med. News*, July 14, 1888, *et seq.*

[2] *Boston Med. and Surg. Jour.*, June 28, 1888.

Charcot, Erb, Catsaras, Ross, McNutt, and Naef. A summarized account is given of seventy-seven autopsies in hemiplegia and spastic paralysis in children. All that is known of the pathology of the condition is that there have been found lesions of the motor tract, atrophy and retarded development of the brain, and descending degeneration of the pyramidal tracts and lateral columns of the cord; and, from the extensive atrophy found in young children at autopsy, it appears that sometimes the disease originates in defective development of the nervous centres, especially the pyramidal tracts.

The third class of Dr. Lovett's cases represents those which were grouped as incoördination, or idiocy. They are presented in connection with the two preceding classes because of their close outward resemblance, on superficial examination, to the hemiplegic and spastic cases. But definite paralysis and spastic rigidity of the muscles are absent, and idiocy obscures every thing. There were thirteen of these cases, five boys and eight girls, and their ages were from one to eleven. In nine the causes appear to have been congenital, in two the history could not be learned. The pathology in these cases covers the pathology of idiocy. All sorts of malformations of the skull and brain have been recorded. Hypertrophy and atrophy of the brain tissue have been described. Localized and disseminated sclerosis, chronic hydrocephalus and pressure from meningitis are among the others. Unlike the cases of spastic paralysis, these children do not seem to have shown much tendency to improve, and mental training seems to be their only hope.

The author, in concluding, calls attention to two or three practical points:

First, the great gravity of the prognosis of hemiplegia in childhood as regards mental enfeeblement, epilepsy, and possibly the transition to spastic paralysis.

Secondly, that the influence of the difficulty of labor in the production of these cases has been very much overestimated.

Thirdly, that the tendency of cases of spastic hemiplegia is to improve, with or without treatment.

And lastly, that the existence of primarily spinal spastic paralysis in the child has got to to be proved anatomically, as well as the existence of the polyencephalitis of Strümpell.

Amencephaly with a Microscopical Study Bearing on Its Relation to the Sensory and Motor Tracts.—Dr. Dana reports[1] a rare case of absence of the fore-brain. The child showed no deformity during its life of two and one half days, except that the head was peculiarly shaped. It was large proportionately, the forehead narrow, and the whole head very narrow and long in the occipito-frontal diameter. On autopsy, a puncture of the membrane between the cranial sutures allowed the escape of a yellowish liquid. Cutting away the calvarium, the whole cranial cavity above the tentorium was found perfectly empty and smooth. The anterior and middle fossæ contained nothing but the foldings of the membranes. In the posterior fossæ the tentorium was bare, but the cerebellum could be felt beneath it. The cerebellum was fully developed and of good size. The pons Varolii was very small. The medulla appeared to be made up mostly of the two large olivary bodies, which almost met in the median line. The corpora quadrigemina seemed fairly well developed. Anterior and external to these were two lobes, evidently parts of the optic thalamus, and the sole representation of the first cerebral vesicle. The spinal cord appeared normal, but small. The greatest interest was attached to the pons and medulla, which were examined microscopically with great care. As the cerebral hemispheres and corpora striata were entirely wanting, there was absence of all those uninterrupted tracts depending for their nutrition on the integrity of those parts. The absence of the pyramidal tracts caused marked changes in the shape and relations of the medulla. The afferent tracts to the brain were present.

Cerebral Atrophy in Infancy.—Dr. Seibert makes a contribution[2] to the study of cerebral atrophy in infancy. He presents clinical illustrations of three classes of cerebral paralysis due to atrophy of the brain substance, but brought on by different causes. In the first class, insufficient blood supply causes a general atrophy of the whole brain. In the case reported the umbilical cord at birth was wound twice around the child's neck. In the second class, acute meningitis leaves a permanent atrophy of the convexity. While in the

[1] *Jour. Nerv. and Ment. Dis.*, Jan., 1888.
[2] *Arch. of Pediat.*, March, 1888.

third class, the chronic progressive inflammation of the pia steadily increases its pressure upon the brain-cortex, gradually, not alone crippling the nerve centres, but ultimately destroying them altogether.

Dr. Henry Ashby of London, has reported [1] the case of a brain affected with diffuse sclerosis taken from a male infant twenty-two months old. The cerebrum was everywhere very firm and tough; the cerebellum was apparently normal. The want of development of convolutions and sulci was a marked feature. At the same meeting at which Dr. Ashby presented the above, Dr. Thomas Barlow described a similar brain which he had investigated. This was the brain of a microcephalic child, in which the disease was of intra-uterine origin.

Arrested Cerebral Development.[2] —Dr Sachs writes upon arrested cerebral development with special reference to its cortical pathology, a condition which represents not only such changes as come about in the process of evolution, but represents changes of the earliest period of infantile development. The author describes a typical case occurring in his practice, where a careful microscopic examination was made. On autopsy, superficial examination showed the cortex hard to the touch, the fissures of great breadth, the convolutions correspondingly narrow, and the left island of Reil unusually exposed. The cells of the cortex showed marked changes in the structure of the small and large pyramidal cells. The author questions whether this was mere arrest of development, or an arrest of development the result of a previous inflammatory process. He thinks that the former is probably the case, since he cannot find any evidence of distinct degenerative changes in the cells; and if the process were one that had set in after the cells had already matured, we should find some, and many more cells than we actually do, exhibiting a more complete formation than any to be found on the specimens presented. Gross changes such as are frequently held responsible for insufficient development were wanting; there was no internal hydrocephalus, no evidence of a general or multiple sclerosis, no trace of a preceding encephalitis. The author concludes that his case presents an agenetic condition pure and simple, affecting the highest nerve elements. As to the cause of this agenetic condition, he is unwilling to speculate.

A Case of Acrania. — Dr. Lockwood of Batavia, Ill., reports[3] a case of absence of scull and scalp in a still-born child, who had probably been alive till just before labor was completed. The cerebral hemispheres were small and unprotected, and the entire integumentary covering to the spine was also lacking. It was a breech presentation. The amount of amniotic fluid was very great. The author surmises that the death at birth may have been due to the removal of pressure from the exposed and partly developed cerebrum.

[1] *Lancet*, Jan. 23, 1886.
[2] *Jour. Nerv. and Ment. Disease*, Sept. and Oct. 1887.
[3] *Medical Record*, Aug. 18, 1888.

OCCASIONAL REPORT ON DISEASES OF THE NOSE, MOUTH, AND THROAT.

BY CHARLES H. KNIGHT, M.D.

Baber (E. C.) on the Causes, Effects, and Treatment of Nasal Stenosis.—This is a very suggestive and practical paper. The points of special interest relate to the treatment of polypi and of adenoid vegetations. For the former the cold wire snare is better than the galvano-caustic loop, and is decidedly preferable to the forceps. The resilient cold wire is unquestionably more easily applied and is followed by much less reaction than the hot wire. If necessary the stumps may be burned, and the subsequent use of sprays of alcohol 1 part, water 3 parts, is recommended. The removal of adenoids, under chloroform or ether, by means of forceps and the finger-nail, the instrument always being guided by the left forefinger, is considered the best method. Voltolini's galvano-cautery gouge, at least in extreme cases, is very inefficient.—*Brit. Med. Jour.*, Sept. 15, 1888.

Macdonald (G.) on Ecchondrosis of the Triangular Cartilage, with a New Operation.—This brief paper opens with the extraordinary statement that "asymmetry of the fossæ is unknown in infancy, and is therefore not congenital." Deformities of this class are attributable to traumatism, or to hypernutrition associated with chronic rhinitis. Bosworth's operation is objected to for the reason that a non-secreting, non-ciliated cicatrix is

substituted for the normal membrane. The author prefers the following operation: A single linear incision is made from behind forwards down to the cartilage. With a raspatory the perichondrium is then turned up and down sufficiently to expose the portion to be removed. Next, the superabundant cartilage is separated with a gouge, or saw if it prove to be ossified. Finally the flaps are allowed to fall together and the fossæ stuffed with iodoform wool, which should remain untouched for twenty-four hours. Healing generally appears to take place by first intention.—*Brit. Med. Jour.*, Sept. 15, 1888.

Bosworth (F. H.) on Asthma.—In a paper read before the American Climatological Association, May 28, 1885, I first advanced the view that hay-fever and perennial asthma are virtually one and the same disease, the one being a vasomotor rhinitis, the other being a vasomotor bronchitis, the paroxysms being excited, in each case, by some peculiar atmospheric condition. The atmospheric condition, as we know in hay-fever, is the presence of the pollen of flowering plants or some other vegetable emanation; whereas the atmospheric condition in perennial asthma, as we may designate those cases of asthma which occur during the whole year and do not depend upon hay-fever, is dependent upon some obscure element which we are, as yet, unable to trace with the same degree of definiteness as we are enabled to trace it in hay-fever. Hay-fever is dependent upon three conditions:

First. A neurotic habit, as was conclusively shown by Beard.

Second. The presence of pollen in the atmosphere, as shown by the unrivalled experiment of Blackley.

Third. A disordered condition of the nasal passages, as shown by Daly.

Now the view that I advocated is that asthma also is dependent on three conditions:

First. A general neurotic condition, as demonstrated by Salter.

Second. A diseased condition of the nasal mucous membrane (not the bronchial).

Third. Some obscure condition of the atmosphere exciting the paroxysms.

In my original paper, I made this assertion, that "a large majority, if not all cases of asthma were dependent upon some obstructive lesion in the nasal cavity. This is evidenced by the immediate relief from the exacerbation by the use of cocaine in the nose in every case in which I have tried it, and, furthermore, by the cure of so many cases by the removal of the obstructive lesion in the upper air-passages."

This paper was read two years ago. The views there stated I would repeat with even more emphasis, for subsequent clinical observation has only served to confirm me in my belief of their correctness.

Notes of eighty cases are given which tend to substantiate the author's theory.—*Am. Jour. Med. Sci.*, Sept., 1888.

Thomson (H. A.) on Tubercular Ulcer and Psoriasis of the Tongue.—The patient was a man, 51 years old, whose tongue had been "sore" for six months. He had been a heavy smoker, but was latterly obliged to give it up from the suffering it caused him. The tongue on examination showed two distinct conditions: there was an ulcer about the size of a florin along the left free margin of the tongue, quite close to the tip; irregularly circular in shape, edges thickened and only slightly raised, the base a good deal excavated and occupied by somewhat prominent shreddy granulations of indolent type. Immediately adjoining the ulcer, over a circular area one inch in diameter occupying the central portion of the anterior half of the tongue, were a series of irregular polygonal plates of a grayish-white color; contiguous, but separated from each other by deep fissures. Towards the margin of patch the plates were not so raised nor so defined, and gradually merged into the normal epithelium.

The patient finally died with pulmonary tuberculosis. The diagnosis was confirmed by microscopic examination.—*Brit. Med. Jour.*, Sept. 22, 1888.

Lewis (C.) on Tonsillitis and Tonsillotomy.—In acute tonsillitis the author does not wait until pus has formed, but when the induration and swelling become marked, and the patient complains of the tearing, dragging pain, which indicates extreme tension of the tissues, he makes a free incision.

Cocaine gives temporary relief, but many object to the discomfort it causes, and the possibility of a toxic effect must not be forgotten. The only reliable drug in acute attacks is salicylate of soda. It generally gives relief, even where there is no history of rheumatism. Gargles worry

the patient, without giving relief. In the subacute stage a mixture of iron and chlorate of potash is of good service. Guaiac is uncertain.

Two cases are cited, one illustrating difficulty in diagnosis, and the other a case of phlegmonous inflammation of the tonsil and palate, relieved by incision, but proving fatal later from embolism of the pulmonary artery. The following features are thought to be distinctive of rheumatic tonsillitis.

1. The induration is more marked in the peritonsillar connective tissue.

2. That the inflammation is less prone to suppurate; and, if suppuration takes place, spontaneous discharge of the pus is certainly delayed.

3. That subacute attacks with a moderate-sized gland are more frequently than not of rheumatic origin, particularly when the sanitary surroundings are good.

4. That in the rheumatic type the induration and thickening of the adjoining tissues are more marked.

The microscopic appearances of specimens of rheumatic tonsillitis and simple chronic inflammatory hyperplasia of the tonsil are described. Then follows a note on gout of the tonsil, and the paper concludes with a consideration of the indications for tonsillotomy. The organ should be excised not only when projecting beyond the pillars of the fauces, but also when it is the seat of recurring acute or subacute mischief. Ordinarily the guillotine is preferred, and the instrument should be sharp, since free hemorrhage is more apt to follow tearing of the tissues with a blunt instrument. Severe and dangerous hemorrhage after tonsillotomy with the guillotine is rare. It may usually be arrested by pressure with swabs of cotton soaked in a solution of the perchloride of iron. Tanno-gallic acid has generally failed, and frequently excites vomiting, which should by all means be avoided. Ergot may be used in persistent oozing; and the hemorrhage seems to be less after spraying with a ten-per-cent. solution of cocaine.—*Brit. Med. Jour.*, Sept. 15, 1888.

Spicer (S.) on the Tonsils; Their Functions, and Relation to Affections of the Throat and Nose.—The author adopts the theory of Hingston Fox as to the functions of the *faucial* tonsils, namely, to absorb from the buccal secretions and from the bolus of food during deglutition certain elements to be used in the blood-manufacturing system. The *pharyngeal* tonsil is thought to do similar duty—that is, so far as concerns the waste of secretion. In the horizontal position in man, the nasal and lachrymal secretions must flow over it. The *lingual* tonsil also occupies a similar position. The enlarged follicles in chronic granular pharyngitis, called the *discrete* tonsils, are referred to in the paper, but for what reason, and why so called, does not appear. After a few brief notes of treatment, containing nothing new, the author concludes as follows:

1. The significance of the various tonsils is in their palpable relation to the blood-manufacturing system and to the outpour of copious secretions. The relations of the tonsils to the rest of the organism can be well appreciated by comparing them with the relations of the sewage farm to the town whose refuse it makes use of, and to which it returns its elaborated products. 2. If any of the secretions delivered to the tonsils become contaminated in any way with irritating matters, whether generated in the system or introduced from without, those tonsils in physiological correlation with the affected secretion show irritative changes varying in degree. 3. The functions and affections of the various tonsils afford the key to the comprehension and scientific treatment—and the prevention—of many of the most intractable and recurrent disorders of the nose and throat. —*Lancet*, Oct. 27, 1888.

In a paper on the rôle of the various tonsils (*Brit. Med. Jour.*, Sept. 15, 1888), William Hill expresses the opinion that the primary function of the tonsil is the same as that of a lympathic gland, namely, a leucocyte manufactory for the supply of blood with corpuscular elements. He also discusses the question of the absorbing and secreting functions of the tonsil and the etiology of tonsillar disease.

Knight (Wm.) on Adhesion of Long Standing of the Soft Palate, Being the Result of Syphilitic Ulceration.—The adherent palato-pharyngei muscles were dissected up under cocaine, chiefly by means of the periosteotome. The loosened posterior pillars were then anchored to the upper bicuspid tooth by a ligature. The posterior nares were blocked by masses of indurated tissue, which were removed by four subsequent

operations at intervals of a few weeks. The patient was directed to pass his finger up behind the soft palate many times a day. In this way the tendency of the parts to contract was overcome. The hearing power was much improved, and a feeling of constriction of the chest with inability to take a full breath, of which the patient complained, was entirely relieved.—*The Ohio Jour. of Dental Science*, Oct., 1888.

Hemorrhages from the Pharynx and Larynx, and Other Hemorrhages That Simulate These.—In papers on this subject by Percy Kidd and A. Hodgkinson, the former concludes that excluding the bleeding that may complicate ulcerating carcinoma, suppuration, or traumatism, hemorrhage from the throat is extremely uncommon, nearly always slight, and for the most part devoid of importance. In the large majority of cases thus described, the larynx and pharynx are not actually concerned; the blood comes either from the lung or from the cavity of the nose or mouth. Hodgkinson admits that it may not always be possible to determine the source of the hemorrhage. He advises withholding a definite expression of opinion, until the diagnosis becomes certain, meantime treating a given case on the assumption that the bleeding comes from the lungs rather than from the throat.

In the course of an interesting discussion several speakers referred to varicose veins at the base of the tongue as a source of hemorrhage. The prevailing opinion was, however, that hemorrhage from the upper air passages, other than pulmonary, was even more rare than popularly supposed. David Newman raised the question of the relation between hemorrhages from the upper air passages and phthisis pulmonalis, and cited several illustrative cases, one in particular of papilloma of the posterior pharyngeal wall. For six months bleeding occurred from the growth at irregular intervals, until finally indications of lung trouble began to appear. He urged the wisdom of frequent physical examinations in suspected cases, and the inexpediency of making a definite prognosis.—*Brit. Med. Jour.*, Sept. 15, 1888.

Newman (David) on Two Cases of Complete Laryngeal Stenosis, Produced by Wounds of the Larynx in Attempted Suicides, Treated Successfully by Tupelo Dilators; also a Case of Syphilitic Stenosis Treated in the Same Way.—In commenting on these cases the author remarks that the advantage of tupelo, over sea-tangle and sponge, consists in the fact that absorption taking place only at the ends of the tent expansion is very slow. Moreover, one end being tied with a ligature, the expanding tent assumes a cone shape, which facilitates its extraction. The details of the method of using the tupelo tent, and of preparing the way for it, in extreme cases, by employing strands of silk, until the passage is large enough to admit a No. 10 urethral catheter, are fully described.—*Glasgow Med. Jour.*, Oct., 1888.

Waxham (F. E.) on Intubation of the Larynx.—This operator has intubated 160 times, and has a record of 28 per cent. of recoveries. He has collected the reports of 1072 operations done in this country, showing 27 per cent. of recoveries. As compared with tracheotomy under two years the record shows recoveries 3 per cent. in the latter and 15.62 in intubation. By using the artificial epiglottis, and placing the patient in the recumbent position, with the head thrown well back, all difficulty in taking food, both liquid and solid, may be overcome. One practical point in the operation is worth noticing. The end of the tube should be passed *under* the tip of the left forefinger. The mind should be concentrated on the *end* of the tube, and no thought should be given to the handle of the introducing instrument.—*Brit. Med. Jour.*, Sept. 29, 1888.

Hooper (F. H.) on Effects of Varying Rates of Stimulation on the Action of the Recurrent Laryngeal Nerves.—In a paper read before the Am. Laryngological Ass'n, Dr. Hooper gives a few experiments, and describes the apparatus and methods employed in his investigations, made in conjunction with Dr. H. P. Bowditch.

We may summarize his conclusions as follows:

1. It requires a more rapid rate of vibration to produce a closure of the glottis in cats than in dogs.

2. In cats the rate of stimulation necessary to effect a closure must be from 70 to 80 a second; in dogs from 30 to 40.

3. Rates slower than 70 a second produce in cats an opening of the glottis; in dogs, rates slower than 30 produce opening.

4. The intensity of the current influences the effect of varying rates of stimulation.

5. Weak currents with slow rates produce opening.

6. By increasing the rates, the intensity remaining the same, closing results.

7. By increasing the intensity, the rate remaining the same, closing results.

8. Closing is produced more readily by increasing the rate than by increasing the intensity.—*N. Y. Med. Jour.*, Nov. 8, 1888.

OCCASIONAL REPORT ON DISEASES OF WOMEN.

BY JOHN S. HAWLEY, M.D.

Penrose (C. B.) on Laparotomy in Two Cases of Extra-Uterine Pregnancy.—The first patient came under observation in Feb., 1888. She had been bleeding from the vagina for thirteen days, and had suffered from continuous sharp pain in the left side for the same period of time. Both the pain and hemorrhage had followed the exertion in lifting a heavy weight. There were no symptoms of pregnancy. Vaginal examination revealed the presence of a small, tender cystic mass, situated at the left of the fundus uteri. After three days' time this mass was found to be much larger. Laparotomy was performed, and a blood-clot removed from Douglas' cul-de-sac. The cyst was found to be a distended tube, which contained a considerable amount of old blood-clots. It was friable, and ruptured during the process of removal. The right ovary was cystic, and was also removed with the right tube. Three months later, the breasts became painful, and there was some secretion of milk, which lasted for two weeks, until arrested by the use of belladonna. The second case was that of a patient who had been confined a year before, and who had not menstruated since the labor until two months before presenting herself for treatment. At that time she was flowing profusely, and for some weeks the flow had been accompanied by the discharge of shreds of tissue. A large cystic mass was found at the right side of the uterus, and laparotomy was done on May 22, 1888. The cyst was found to be full of blood, and situated to the right of and posterior to the uterus. The right tube opened into it, and the left ovary being cystic was also removed. The patient recovered.—*Weekly Med. Review*, Sept. 15, 1888.

Hulbert (Geo. F.) on the Use of Electricity in Inflammation as Found in Gynæcology.—With a protest against the indiscriminate employment of oöphorectomy, an account of the results of treatment by electricity of cases of ovaritis, salpingitis, hydro- and pyo-salpinx, and pelvic peritonitis, acute and chronic, is given. The results were not uniformly good, and although no deaths are recorded, some cases were perhaps made worse by the treatment. Enough of good was done to justify the opinion that oöphorectomy should never be done until the electrical treatment had been employed without effecting a cure. In the case of pelvic inflammation, the complex phenomenon of nutrition, or processes of growth and repair, must be considered, as well as the local difficulty; in other words, there must be an abnormal condition of the organs before any disease can affect them, or any septic germ find in them a soil in which it can multiply and flourish. The nervous system, especially the sympathetic, furnishes the means through which the process of nutrition is accomplished, and through which the beneficial effects of electricity are exercised. The chief field of usefulness of this agent is that which covers especially the process of repair. By its influence absorption of inflammatory products is promoted, improvement of the general health secured, and proper innervation produced. In many cases other methods of treatment must be employed at the same time, as no claim is made that electricity is a specific in the treatment of pelvic inflammations. It is to be used with caution, as its power for harm is great. Therefore the patient should be prepared exactly as if for a surgical operation, as the electrical force should be considered as the knife in the surgeon's armamentarium.

The cardinal principle to govern in the application of electricity should be the general and complex effects—such as electrotonic and catalytic—rather than the electrolytic, except in the treatment of fibroid tumors, where destruction of tissue is the object to be gained.

In the treatment of acute inflammation, the congestion, œdema, etc., should first be removed by the use of the faradic current, obtained from the long, fine-wire coil, vagino-abdominal, as general as possible, and

with the positive pole in the vagina. The current strength should be slowly increased until the point of toleration without pain is reached, using the large vaginal and abdominal electrodes, and should be continued until the patient declares that she feels easy. Repeat the application as soon as there is a return of the original pain, and continue to use the current as long as any pain or tenderness remains. If at any time the pains are aggravated by the remedy, use the bipolar vaginal electrode, or, if this does not improve matters, abandon the treatment entirely. If no active inflammation is present, but only the results of such process and passive congestion are found, the faradic current from the short, thick-wire coil is to be used, on account of its more prominent mechanical effects. After the conditions attendant on inflammation of the appendages have been removed, by the use of such means, the preparation for operation, so to speak, has been completed. Taking a case of pyo-salpinx as an illustration, the contents of the distended tube may be removed or allowed to remain for a time. If the former plan be adopted, the cyst is emptied by the aspirating trocar, washed out with an antiseptic solution, and then the trocar used as an electrode for the galvanic current. This causes the formation of a sinus with thickening of the tissues surrounding it, and which can be utilized in any washing out of the cavity which may subsequently be necessary. If any growth remains, negative galvano-caustic applications are to be made to the endometrium; if not, galvanic applications alone are employed by means of a cotton-covered sound, with antiseptic applications and the tampon after each treatment, alternating with faradization of the sympathetic. The canula is left *in situ* until the treatment is over.

If the latter plan be chosen, positive galvanization of the endometrium is employed, remembering that reaction follows its use as if it were a surgical operation, and therefore following each application with the tampon and quietude of the patient. This course is pursued, the applications being repeated at intervals of from three to seven days, until improved nutrition is manifested by cessation of the leucorrhœa, absorption of the neoplasm, and improved general condition of the patient. The negative pole is now used in the vagina, often alternating with general faradization of the sympathetic, one pole, usually the positive, in the vagina, and the other over the lumbar region, or, later, over the cervical sympathetic over the anterior triangle of the neck. Having caused the absorption of the inflammatory neoplasm, the tube is to be emptied by aspiration, and the treatment continued as before described. In cases of hydro-salpinx, the aspirator may be used, but probably the contents of the tube will have been absorbed by the time the preparatory treatment is ended. In ovarian abscess also the aspirator may be used, but when there is no manifest progress, and the hyperplasia is great, electro-puncture by the use of insulated needles introduced through the vaginal walls may be employed. In simple ovaritis, the beneficial results of faradization of the sympathetic will be manifest.

In stubborn cases, a very efficient means of treatment is found in the use of general galvanization of the sympathetic and spinal nervous systems, which may be combined with local applications by the use of "divided currents."

The "mixed current," or the so-called "primary current" of the faradic battery, which is composed of a rapidly interrupted galvanic current plus the inductive influence of the individual turns of the wire which carries that current, produces both sedative and catalytic effects, and is indicated in the treatment of subacute and chronic inflammations. The positive pole is used in the vagina when anodyne effects with stronger mechanical effects than are produced by the current from the long fine-wire coil; the negative pole, when stimulation and only moderate mechanical effects, are desired. The inductive element may be increased by uncovering the iron core, and the galvanic element is made predominate by covering the core and increasing the electro-motive force.

From observation and experience, the following conclusions are offered:

1. That the cases in which Tait's operation is indicated are purely those in which inflammation, septic or specific, is the active agent.

2. That the removal of this inflammation and its results with restoration of local and general tone is the problem to be solved.

3. That this accomplished, the functional activity remaining is no valid reason why the tubes and ovaries should be removed.

4. That in electricity we find the power

of restoring such a high grade of nutrition that a recovery from the local expression of disease is possible.

5. That the removal of the dead effete products, such as pus, is not possible and must be done by surgical methods (aspiration), but that neoplasm in any form will become absorbed and recovery ensue.

6. That electricity will not work alone, but must receive legitimate assistance in the direction of maintaining the benefits of each application.

7. That the dominant idea in the treatment should be first the general effects of the remedy, catalysis, the polar effects, electrotonus, and secondly, the polar effect, electrolysis.

8. That electricity should have a fair and intelligent trial before a resort to the knife be had.

9. That Tait's operation is justifiable only in those cases which electricity will not *completely* relieve.—*St. Louis Courier of Med.*, Sept., 1888.

Emmet (T. A.) on the Cause and Treatment of Urethrocele.—This condition is always found to exist, to a greater or less extent, in those cases presenting a serious double laceration of the cervix, and is most marked in women who have borne many children.

So-called laceration of the perinæum is a common co-existing condition, but does not in any way stand in a causal relation to urethrocele. The term should be confined to the condition produced by actual injury to the urethral canal, leaving it sacculated and shortened, but not necessarily patulous. It is caused by pressure by the child's head's during labor, the urethra being dilated by the forcing of the loose tissue about the neck of the bladder into its lumen, resulting in partial or complete displacement of the mucous membrane and submucous tissues along the lower portion of the canal. Lacerations, both longitudinal and transverse, of the urethral mucous membrane often occur as well. Often the passage of the probe will reveal the fact that the diameter of the canal is greater than its length, but it becomes so obstructed by prolapsed tissue from the bladder, or by its own thickened and diseased mucous membrane, that an actual impediment to the passage of the urine exists. Moreover, a pouch is often left by the cicatrization of each end of a laceration, permitting the retention of a portion of urine and irritation from its decomposition. Reflex symptoms are common attendants on the lesion. The treatment, applied with success in a number of cases, has been the removal of all redundant tissue through a "button-hole" made in the middle third of the urethra, the mucous membrane of which is to be then united by sutures to the edges of the incison in the vagina after the length of the canal has been restored by traction applied to the two extremities of the incision. This opening is to be left until the normal condition of the mucous membrane of the urethra is restored, and may then be closed after the same manner as a fistula. Details of the operation are given in the author's "Principles and Practice of Gynæcology."—*N. Y. Med. Jour.*, Oct. 27, 1888.

MISCELLANY.

Chuquet (P.) on Retrograde Catheterization.—By retrograde or vesico-urethral catheterization is understood catheterization practised from the bladder to the urethra by means of a pre-existing or artificial supra-pubic opening into the bladder. Verguin of Toulon first employed it in 1757. The author considers the operation indicated when an impassable urethral stricture exists and a careful external perineal urethrotomy fails to reveal the posterior portion of the canal. Where a hypogastric fistula already exists, a sound, with a large curve, is introduced into the bladder, its tip is passed along down behind the pubes, easily engages in the urethra, and is passed along till stopped by the stricture. With this as a guide, external perineal urethrotomy is performed and the continuity of the urethra is restored. Of course the strictest antiseptic precautions are practised and continued until the *sonde à demeure* is removed. After that a full-sized sound is passed every day or every other day, and the hypogastric fistula, if not healed, is encouraged to do so. Where the hypogastric fistula does not exist, one is made, and the operation otherwise is the same.

Twenty-four cases have been reported. In fifteen the operation was necessitated by a perineal stricture due to traumatism; three were cases of prostatic hypertrophy, and six were cases of stricture following gonorrhœa. They occurred in the prac-

tices of Tillaux, Beaucard, Duplay, and Poisson.—*La Thérap. Contemp.*, Oct. 5, 12, 26, and Nov. 2, 1888.

Héricourt (J.) and Richet on Peritoneal Transfusion and the Immunity it Confers.—In their experiments the authors found that direct transfusion, from the vessels of dogs to those of the rabbit, generally proved fatal, while from one to two ounces of blood could be conducted from the vessels of the dog directly into the peritoneal cavity of the rabbit without producing any bad result. A larger amount than this generally causes death in twenty-four hours.

The effect of this transfusion is immediate. Very rapid breathing and the discharge of large amounts of clear urine occur. The animal crouches flat on his belly, and the temperature of the body falls 3° to 5° F. All these symptoms are explained by the rapid passage of the intra-peritoneal blood into the circulation and by the solvent action which the serum of the dog's blood is known to have upon the red globules of the rabbit.

The most remarkable fact is the immunity which this intra-peritoneal transfusion seems to grant against inoculation with the *staphylococcus pyosepticus*.

Animals so transfused resist to an extraordinary extent this poison, having little local œdema, not much fever, and a small mortality. This immunity is still more marked if the injected blood is taken from a dog which has been inoculated with the poison and has survived it.—*L'Union Méd.*, Nov. 10, 1888.

Crocker (R.) on a Case of Paget's Disease Affecting the Scrotum.—The patient was a whitesmith, aged 60, in whom the disease began in the summer of 1886, without apparent cause. Superficial ulceration appeared on the anterior part of the scrotum and under surface of the penis, somewhat resembling eczema, but very sharply defined, and the excoriation was evidently deeper than an ordinary dermatitis. A great variety of both internal and external treatment was employed without any good effect, the diseased area gradually extending laterally, but without other change until November, 1887, when two nodules were noticed on the left side, one the size of a pea, the other of a large bean. They were firm to the touch, and covered with a yellowish secretion. The malignant nature of the disease was then apparent, and its similarity to the disease of the nipple recognized, an analogy with which Sir James Paget concurred. The whole diseased area was therefore excised by Mr. Godlee; sound cicatrization took place, and six months later there had been no recurrence. The microscope showed an alveolar structure, sometimes with scanty, sometimes with abundant stroma, the alveoli containing aggregations of small epithelioid cells, suggesting in many respects the structure of the rodent ulcer. The malignant change commenced probably in the sweat coils and ducts.—*Brit. Med. Jour.*, Nov. 10, 1888.

The Form and Frequency of Cardiac Complications in Rheumatic Fever.—Dr. Samuel West gives a number of statistical tables on the form and frequency of cardiac complications in rheumatic fever, based upon 1,137 cases admitted into St. Bartholomew's Hospital during six years' time. They formed 7.31 per cent. of all cases admitted to the hospital. Death occurred in 15 cases, the liability to it being about equal in both sexes. Nine of these occurred in children under ten; the mortality in adults was 0.5 per cent. The cause of death was found in the heart in all cases; but one case of hyperpyrexia was met with, and this recovered. The proportion of males to females was nearly as six to five; 61.4 per cent. occurred between the ages of fifteen and thirty years; four cases occurred in persons under five years of age. The average age at the time of the first attack was about twenty-two years, and was about the same in both sexes. Of the 1,137 cases but 465 escaped without heart complications, a percentage of 29.14. The liability to cardiac complications increased with the number of the attacks. In the first attack the percentage was 58.8, and in the fourth attack was 81.9. Although the number of cases occcurring in males was greater than in females, the percentage of heart disease was smaller—64.16 in males, 77.56 in females; and the same difference was observed in the percentage of each attack. Mitral disease existed alone in 47.1 per cent.; in association with aortic disease in 4.58; and with pericarditis in 7.6 per cent., making a grand total of 59.28 per cent. where the mitral valve was affected. The mitral was affected alone in males in 37.9 as against 56.3 for women. When associated with pericarditis the percentages were 6.6 to 8.6

in favor of the males—but when associated with aortic disease the percentage for males was 6.3 as against 2.86 for females. The aortic valve was affected in 9.6 per cent. in males as against 4.66 per cent. in females, and when the aortic valve was alone affected the percentage was 2.86 for males and 1.8 for females. Pericarditis occurred either alone or with endocarditis in 7.5 per cent., the pericardium being alone affected in 6.48 per cent., the advantage being here in favor of females, 5.36 per cent. as against 7.5 for males. Mitral disease was seventeen times more frequent in females than aortic disease, while in men it was only 5.5 as frequent.—*The Practitioner*, Aug., 1888. W. V.

Franks (K.) on Colectomy for Malignant Disease, with Suture of the Intestine.—The patient was a man aged fifty-eight, from whom he excised a large epithelioma, together with about six inches of the colon, October 30th. The growth was the size of a large orange, and involved the hepatic flexure of the colon. It was remarkable previous to operation for its great mobility, generally being found to lie between the umbilicus and pubes as the patient lay on his back. The colon was divided on each side of the tumor and the intermediate portion removed, along with some small but hard glands which lay between the layers of the meso-colon. The divided ends of the colon were approximated, and sutured carefully with fine silk. The patient is at present in a convalescent condition. There was a large fæcal evacuation on the fifth day, per anum, and the bowels have been acting normally since. The structure of the growth was that of a columnar-celled epithelioma.—*Lancet*, Nov. 17, 1888.

Millard (F. R.) on Lobelia Inflata as a Surgical Dressing.—First case: Mr. B. had his index finger amputated by machinery. A compress of absorbent cotton was applied with a light roller and saturated with tincture lobelia, and directions given to keep the cotton constantly wet with the tincture. He complained of a burning, smarting pain for a few minutes, and returned to his work. The dressing was not removed till the wound was healed. He stated that it was inconvenient to have a rag on his finger, but otherwise it gave him no trouble.

Soon after Mr. W. called, about 11.30 A.M., having had the middle and ring fingers of the right hand taken off in a planing mill. (The index finger had been lost some years before in the same way.) The fingers were dressed and treated in the manner above described. He went home to dinner, and from there to the mill, and did not lose an hour's time from the accident. He stated that unless they got bruised in some way they gave him no pain after the first day.

I have used it since then in all cases of amputations of the fingers and toes, and in many cases after removal of small tumors, cuts, etc., and it has been much more satisfactory, both to myself and patient, than carbolic acid or iodoform. Whether a troublesome or dangerous absorption would result from its use on the stump of an arm or leg, could only be told on trial.—*So. Cal. Pract.*, Nov., 1888.

An Immense Duodenal Ulcer.—Drs. Svensson and Wallis report the following interesting case of "duodenal ulcer, causing complete obliteration of the common bile duct, the hepatic duct, the cystic duct, and the canal of Wirsung." The patient was a man of forty-three, who had been taken ill ten months previously with symptoms which indicated a complete obstruction of the flow of bile into the duodenum. He had lost strength and flesh to such an extent that it was thought advisable to re-establish the flow by an operation. Accordingly a communication was made between the base of the distended gall-bladder and the small intestine. The patient died a few days after the operation. At the necropsy an ulcer was found in the duodenum, exactly in the position of the common bile duct and the canal of Wirsung, the hard fibrous tissue which formed its base having obliterated these channels. The inflammatory material had extended so far that the cystic duct was altogether closed. The hepatic duct, the canal of Wirsung, and the gall-bladder were all very much distended. The necropsy also showed that the end for which the operation had been performed had not been attained.—*Lancet*, Nov. 10, 1888.

Stewart (G.) on a Peculiar Nervous Condition.—The patient was a woman of 58. Whenever she closes her eyes, she takes a kind of fit, or seizure, which begins by her giving a longish snort or snore, followed immediately by unconsciousness, lasting from thirty to forty seconds. In whatever position she is, she takes this

seizure whenever she shuts her eyes. Darkness produces it similarly. On going to bed she easily falls asleep, after one of these seizures brought on either by shutting her eyes, or on the room being darkened. This gave the impression that arrest of retinal stimulation had something to do with the fit, until it was found that when an object was brought within six inches of her eye, the same effect was produced. Eighteen years ago the patient suffered from "rheumatic fever," which lasted six months, and was followed by ptosis and squint, suggesting specific disease, but there was never any other evidence of a specific process. For many years she had had no sense of smell; sight is gone in one eye; in the other there is posterior staphyloma and optic atrophy, and the eyeball is deficient in movement. —*Med. Press*, June 13, 1888.

Syphilis Contracted through Striking a Blow.—A laboring man came in August last, complaining of weakness, *malaise*, sweating on slight exertion, not feeling up to his work. Tongue slightly furred, temperature 100°, previous health good in every way. I could find nothing to account for his state at first, but, noticing his left hand bandaged, he admitted there was a sore on the knuckle, which had been under treatment for some time by a woman, but was very slow in healing. Uncovering the hand, I found a perfectly circular sore, the size of a threepenny piece, with clean-cut edges, bright red, without discharge, and surrounded by a purple area of very well-marked induration. Suspecting a venereal inoculation, I questioned him closely, but he affirmed most positively that such could not be the case, as he had never "gone in the way" of it. As he was a married man, sober, and of good moral character, well known to me for a long time, and as his wife was perfectly healthy, and, like Cæsar's, above suspicion, I felt compelled to believe his statement, and that my diagnosis must be at fault. I therefore ordered a tonic mixture, and simple dressing to sore, supposing that some irritant dressing might have caused all the trouble.

After a week or so, finding no improvement whatever, but that, on the contrary, he had now an enlarged hard gland in the axilla, slight sore throat, and a few pimples about the scalp, I felt bound to tell him he had undoubtedly got syphilis in some way or another. It was a difficult matter to convince him of this; but, on a close cross-examination, it turned out that he had had a dispute with another man about three or four weeks before he came to me, and that this man, who was somewhat intoxicated, had angered my patient so much, that the latter had struck him a blow in the face with his left hand, scratching his knuckle in doing so by contact with the other's teeth. There was no other probable source of infection that could be made out.

I put him on large doses of potassium iodide, and in a week or so there was marked improvement in all the symptoms. In brief, he was soon well, thus confirming the diagnosis.

Being curious to trace the origin of the infection to its source, I wrote to the surgeon of a distant mining settlement, to which my patient's antagonist had since gone, asking him to keep an eye upon the man, and report to me. After some weeks I received a reply from him to the effect that our man had turned up to consult him about well-marked secondary and tertiary symptoms of syphilis, contracted, as he admitted, two years before, and for which he had been under treatment.

It remains now to be seen whether my patient has unfortunately infected his wife, who is, moreover, pregnant.—Anonymous correspondent in *Brit. Med. Jour.*, Nov. 24, 1888.

Oliver on a Case of Absence of Vagina, Uterus, and Ovaries.—A pale and rather undersized young woman, aged twenty-one years, complained of pain in the hypogastric and lumbar regions. She had never menstruated. On examination, heart and lungs were found to be healthy, the breasts were not developed, tonsils were absent, and on searching for a vagina, only one small opening was found, that of the meatus urinarius. For a short distance below and around it the mucous membrane was rough and granular. Dr. Oliver passed his finger into the bladder, but nothing was felt save the wall of that viscus. Another finger was passed into the rectum; this came at once into close and immediate contact with that in the bladder, nothing separating them but the walls of bladder and rectum. As far as the fingers could reach no trace of ovary was felt. The amenorrhœa was thus due to complete absence of ovaries, uterus, and vagina.— *Brit. Med. Jour.*, Nov. 24, 1888.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of

CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital; CONDICT W. CUTLER, M.D., Instructor in Diseases of the Skin, Post-Graduate Medical School, New York; JOHN S. HAWLEY, M.D., Attending Gynæcologist, New York Hospital, Out-Patient Department; FREDERICK PETERSON, M.D., Lecturer on Nervous Diseases at the New York Polyclinic.

VOL. V., NO. 51. December 20, 1888. WHOLE NO. 99.

CONTENTS.

	PAGE
Medicine and Pathology	605
Occasional Report on Orthopædic Surgery	607
Therapeutics	613
Book Notice	616

MEDICINE AND PATHOLOGY.

Marie on Hysteria in Sulphide of Carbon Poisoning.—The author has observed two cases of hysterical hemiplegia among laborers employed in the manufacture of sulphide of carbon. In these cases the symptoms were, hemianæsthesia and a limitation of the visual field with macropsia or micropsia.

His cases, combined with those reported by Delpech, Bonnet, and Huguier, show the following to be the symptoms of the disease. Marked disturbances of general and special sensibility; more or less complete hemianæsthesia, zones of anæsthesia, not following the course of nerves, but limited by a circular line at the junction of the limbs and body. Sometimes hyperæsthesia. Anæsthesia of the cornea, diminution of the acuity of vision, narrowing of the visual field, monocular polyopia, macropsia or micropsia. Impairment of hearing, smell, and taste.

As motor troubles—hemiplegia, paraplegia, or monoplegia, occupying a member or a segment of a member, as in traumatic hysteria and labio-glossal hemispasm, are noticed.

More rarely are seen hysterical convulsions, headache, with constriction about and throbbing in the temples, nightmares, emotional disturbance, and mental depression.

The disease comes on slowly or suddenly in an apoplectic way.

One of Marie's patients felt a sense of heat in his scrotum, but kept on at work; soon he felt as if struck on the head and fell unconscious, remaining so an hour and a half "as if asphyxiated." He slept well but awoke in the morning with a tingling sensation in the right upper extremity, which grew more intense and gave way to paralysis in three or four days; the lower extremity on the same side following suit in a few days.

This abnormal sensation about the genitals, heat, cold, or constriction, is a true hysterical aura and is common to all the workmen, and should they on its appearance immediately seek fresh air, they might avoid further trouble.

Genital excitement, impotence, and metrorrhagia are common among the workers. The author thinks some of the paralytic manifestations are due to peripheral neuritis.—*L'Union Médicale*, Nov. 18, 1888.

Hewetson on the Danger of Septic Infection Arising from Nasal and Aural Discharges in Midwifery and Surgical Practice.—Some little time ago attention was drawn by Sir Spencer Wells, I believe, to the case of a now celebrated ovariotomist, who despite all his constant care and watchfulness, continually found his operations followed quickly by a fatal result. I think it was suggested to him that this fatality might arise from some personal condition, and at length, on application to a skilful dentist, a suppurating molar tooth, which was removed, revealed the cause of the fatality, and with the removal his success began. Dr. Matthews Duncan has also quoted one or two cases of medical men suffering from some form of rhinorrhœa, whose attendance in the lying-in chamber was particularly disastrous to their patients. But I do not think that sufficient stress has yet been laid on this very broad

question, as a whole, in regard to septic infection generally. Every one in Leeds remembers the case often quoted, in which three leading members of the profession several years ago attended the post-mortem examination of a case of peritonitis, and each afterwards within the next twenty-four hours attended a labor, with a fatal puerperal fever in each instance. My attention has recently been very seriously drawn to the great danger which attends the parturient patients of those who are the subjects of even a slight otorrhœa, or in whom there is some nasal discharge of an offensive nature.

Some time since I was consulted by a medical man for an affection of the left ear. He heard badly on that side, and suffered from great depression of spirits; he was pale and anxious-looking (though naturally he was bright, cheerful, and energetic), and spoke despondingly of his future and his position. I found that there was a small perforation of the membrana tympani, and a thick semi-solid discharge lay on the floor of the meatus, but never appeared externally; but it was, when disturbed, horribly offensive. I asked him if he was aware of the otorrhœa, and he assured me that the deafness was the only thing which troubled him. I was exceedingly anxious to learn from him the results of his large midwifery practice. I found that his misfortunes in this department from puerperal septicæmia were very constant, and also that many who recovered only did so after passing evidently through an attack of septicæmia. It was at once evident to him that his ear trouble, which constantly caused irritation and consequent—often unconscious — scratching for relief, was the obvious cause of much of the puerperal trouble which he related to me. The treatment which we adopted very quickly set matters to rights, and I am glad to say that, though he was obliged to change his practice, he has done exceedingly well in midwifery practice ever since. His health also quickly returned.

My second case was as follows: A friend of mine, being called away, his assistant undertook an important midwifery engagement some distance off, and all went well until the end of the third day after delivery. Puerperal fever set in, with a rapidly fatal termination. I was asked to examine the assistant, and I found that he suffered from tertiary syphilis, disease of the nasal septum, with a most offensive discharge, and foul breath. He was obviously a danger to any lying-in women, and I advised that he should be completely rid of his trouble before he again played his part in general practice.

These cases point strongly also to the possibility of nurses suffering from aural or nasal discharges being the media of infection.—*Lancet*, Nov. 24, 1888.

Wallich (V.) on the Tubercular Nature of Synovial Rice-Grains.—Two rabbits were inoculated with riziform bodies taken from a palmar synovitis. In one case the foreign body was placed in the peritoneal cavity; in the other, in the subcutaneous cellular tissue. The first animal died in three months, and an autopsy disclosed numerous tubercles on the surface of the peritoneum, in the lungs and spleen, and everywhere in these organs, tubercle bacilli. The second animal still lived, but had at the point of inoculation a large ulcer of a tubercular aspect. So far no tubercle bacilli have been found in these rice-grain bodies themselves, nor will they, when implanted in culture liquids, develop any but ordinary micrococci.—*La Tribune Méd.*, Nov. 25, 1888.

Aikins (W. H. B.) on Cardiac Polypus, Causing Sudden Death.—The subject of the autopsy was an old negress from whom a cataract had been removed without the administration of a general anæsthetic, but by the aid of a local application of cocaine. The operation was successful, and the wound healed kindly, but the patient suddenly expired on the sixth day after operation. No cardiac lesion had been detected upon stethoscopic examination before she underwent operation.

There were fibroids of the uterus—above six pounds in weight—which had undergone extensive calcareous degenerative changes. The valves of the heart were free and the cavities normal, save the right auricle, which was dilated and almost entirely occupied by "a true polypus," or a true polypoid growth resembling an organized *ante-mortem* coagulum, and attached by a firm pedicle to a point corresponding with the situation of the Eustachian valve in the *sinus venosus*. The pedicle, which was half an inch broad, was covered with endocardium, which continued also over a portion of the mass. This polypoid, pear-shaped growth was elastic, tough, and tenacious, measuring two inches in its long diameter.

The patient died suddenly, and in all probability from a displacement of the polypus, which completely occluded the auriculo-ventricular orifice.

I have been unable to find any record in the literature at my disposal where instant death resulted from the displacement of a thoroughly organized pediculated fibrinous coagulum.—*Canad. Pract.*, Dec., 1888.

Gould (G. M.). Is Electric Light Injurious to the Eyes?—After an exhaustive study of this subject the author concludes that:

As regards general hygiene, the superiority of the electric light over gas as an artificial illuminant is so overwhelming as to admit of no discussion. It is incontestibly the light of the future, and the public should not rest until its meeting-places are lit by the most perfect system at its command.

A study of the published cases of injury of the eyes by the electric light shows that not one was due to the use of the diffused light as an illuminant. The popular prejudice against such a use of it is absolutely without justification. All the cases reported were of scientific investigators, etc., or workmen about the light, who approached it very closely, gazed at it protractedly, and without protecting colored spectacles.

The ocular injury is due, not to the supposed preponderance in the electric-light rays of violet and ultra-violet (chemical or actinic) waves, but simply to the greater number (intensity) of the usual length light-waves.

The symptoms of the ocular injury are possibly immediate temporary "retinal paralysis," blepharospasm, central scotomata, chromatopsia, after-images, etc. Within twenty-four hours there come on intense photophobia, ocular pain, a feeling as of foreign bodies beneath the lids, conjunctival hyperæmia and congestion, pericorneal circles, etc.

The attack usually lasts but two or three days; the prognosis is excellent; the treatment is simply cocaine and atropine instillations and cold or hot compresses.

Workmen and experimenters who must approach closely to the electric-light should protect their eyes by smoked or tinted glasses, the depth of the tint being greater where the light is more brilliant, the proximity greater, or the exposure longer. In the welding-works the workmen must be particularly careful about this, and must also not expose the skin of the face, neck, and hands to the action of the light.—*Medical News*, Dec. 1, 1888.

OCCASIONAL REPORT ON ORTHOPÆDIC SURGERY.

BY JOHN RIDLON, M.D.

Bradford (E. H.). Two cases of Incision into the Hip-Joint, with Observations as to Distraction in Hip Disease.—The writer wishes to place upon record two cases of direct incision into the hip-joint at an early stage of hip-disease, done for the purpose of checking the night-cries, which were exceptionably severe (fourteen to fifteen times during the night), and which other measures had failed to control. In both cases it was supposed that the joint contained pus within a persistent joint cavity. In one of these cases, a girl of six, the incision was not perfectly done, and gave incomplete drainage, and no benefit was obtained by the procedure. In the second case, a boy of four, a small quantity of thick pus was evacuated and the patient's symptoms decidedly relieved, but not until a short time after the operation. The immediate effect of the operative interference appeared not to be beneficial, and the sensitiveness of the joint was increased for a few days.

No difficulty was encountered in opening the joint. A straight incision was made behind the trochanter major, extending above it. After the skin and muscles were divided and separated, the finger was thrust down to the joint and used as a director; the capsule was reached at the upper and back part of the joint. This was opened and the opening dilated. No distension of the capsule of the joint could be felt, and but a small quantity of thick pus was evacuated. The capsule wall, however, was found to be comparatively soft. After a slight pull upon the limb the femur was pulled away from the acetabulum and the finger could be inserted between the acetabulum and the head of the femur; both were found to be covered with granulations. No explanation could be found for the persistent night-cries. The treatment after the operation was the same as before; namely, fixation by means of a fixation frame, and extension by an extension

splint, and at the end of three weeks the boy was allowed to walk about on his crutches, elevated shoe, and wearing his extension splint,

It cannot be claimed that the amount of benefit obtained in those cases warranted the operative interference. In a large majority of cases the night-cries are readily checked by extension and fixation.—*Boston Med. and Surg. Jour.*, Aug. 16, 1888.

Richardson (J. E.) on Hip-Joint Disease, with Special Reference to its Mechanical Treatment.—The questions which I desire to submit for consideration are, first: Which is the more rational treatment of disease of the hip-joint, to secure fixation of the joint or to permit motion during the treatment? Second: What particular mechanical appliance most nearly fulfils the indications of treatment?

There would be but little demand for all the great variety of apparatus if cases of hip-disease were recognized early, for this is the time when we may expect the best results to follow the mechanical treatment of the diseased joint, or a treatment which has for its basis, rest; neither would we see so much suffering nor the hideous deformities resulting from disease of the hip-joint.

It is a question which admits of doubt whether it is possible to produce extension and allow motion of the joint without at the same time having friction of the surfaces of the joint. In the inflamed condition in which the joint usually is in this disease, it seems certain that with motion, friction must necessarily occur, and with it a very serious obstacle to recovery. If this be so, not until we secure absolute and complete rest to the joint can the process of repair proceed; but on the contrary, there will be a rapid and total destruction of the joint surfaces.—*Brooklyn Med. Jour.*, Sept., 1888.

Lovett (R. W.) on an Experimental Study of Fixation and Traction in Hip-Disease.—American traction-splints are criticised by English surgeons on the ground that they afford imperfect fixation. With a view to ascertaining how much fixation traction alone affords, some experiments were made upon a healthy child. It was found that with four pounds traction, exerted by means of a hip-splint with one perineal band, in walking 35° of motion took place. With the highest endurable traction (eight pounds) 15° of motion took place. Evidently, then, traction alone cannot afford fixation to a diseased joint. It does not seem likely, either, that it separates the joint surfaces, inasmuch as in the case experimented upon the power of the thigh muscles was roughly estimated to be thirty-six pounds. With all their force when set in muscular spasm, they would pull the head of the bone against the acetabulum with more than that power, and the antagonizing force is only eight pounds at most. Experiments as to distraction upon the cadaver do not reproduce the clinical conditions, inasmuch as muscular spasm, the most important factor of all, is left out of account.

A hip-splint, providing fixation as well as traction was shown, being merely a slightly modified combination of the English Thomas splint with the American traction-splint. Its best use is in bad cases where any joint motion does harm, and in cases where deformity is present, inasmuch as it is possible to correct the deformity while the child goes about on crutches. Dr. Ridlon showed a body-piece attached to a long-traction hip for the sake of giving better fixation, and an easy means of giving abduction or adduction.—*Med. Record*, Sept. 22, 1888.

Gibney (V. P.) on Immobilization in Articular Disease.—The question whether fixation of a joint about which disease of the bones exists is detrimental, or contributes in the least to the permanent impairment of the functions of the joint, has for many years been a most important one, and the statement has been made time and again, by both orthopædic and general surgeons, that any prolonged treatment of a joint which arrests the functions of the same is the chief factor in the production of anchylosis.

Upon this theory, splints for the protection of joints are constructed, and the American method of treating diseased joints is known as extension with motion.

Since 1884 I have applied plaster of Paris to nearly every joint in the body. When in consultations I have advocated resection of a knee in an adult patient who has suffered from childhood from white swelling, I have been urged to put the knee up in plaster of Paris, and get anchylosis as soon as possible. My experience in such cases has been simply this: the better fit I secured with my plaster dressing, and

the longer I have kept it applied uninterruptedly, the greater was my disappointment at not finding any anchylosis; in other words, the range of motion was increased by the prolonged fixation.

In concluding, let me state firmly my belief that whatever anchylosis occurs in a joint which has been subjected to immobilization, occurs by reason not of the immobilization, but of the nature and intensity of the inflammation, and of the inefficiency of the apparatus employed.—*N. Y. Med. Jour.*, Oct. 27, 1888.

Ridlon (J.) on Rest in the Treatment of Chronic Joint Disease.—As applied to a joint, whose normal functions are motion and resistance to pressure, rest means a cessation from, or absence of, motion and pressure between the articular surfaces. We accomplish this by fixation or immobilization of those parts capable in any degree of producing intra-articular motion, by the removal of the superincumbent weight, and by the counteraction of muscular spasm.

Rest, in the treatment of chronic joint disease, does not necessarily imply rest in bed; nor does it imply a deprivation of sunlight and pure air; neither does the removal of the superincumbent weight necessarily imply the use of axillary crutches; nor the counteraction of muscular spasm imply the use of elastic traction.

In 1855 the so-called "American method" of treating chronic joint disease was devised by Henry G. Davis. It consisted of a portative apparatus, designed to give elastic traction and at the same time allow of free motion at the joint, or as it has been called, "motion without friction."

Davis said: "By this means we also get passive motion without friction."

C. F. Taylor (1873) says: "Motion without pressure is not only not injurious, but is highly beneficial."

L. A. Sayre (1883) says: "Motion is as essential to retaining a healthy condition of the structure about a joint as light is essential to retaining a healthy condition of the eye."

Taylor no longer believes in the desirability of motion without pressure while the inflammation is acute and progressive, using fixation with counter-extension in such cases.

Sayre [in the author's opinion] treats the ankle, knee, and spine with the aim to secure immobilization, and at the hip, secures by his apparatus a partial immobilization.

Judson aims at fixation and the removal of the superincumbent weight.

Willard believes in "fixation and rest."

H. O. Thomas teaches "enforced, uninterrupted, and prolonged rest."

All the more recent writers on the subject, H. A. Reeves (1885), Edmund Owen (1885), H. W. Page (Treves Surgery, 1886), Howard Marsh (1886), C. N. Macnamara (1887), G. A. Wright (1887), Robert Jones (1888), and V. P. Gibney (1888), agree upon the importance of immobilization, either with or without traction.

In recapitulation the author says:

The theory of motion in the treatment of chronic joint disease was the result of the old fear of anchylosis; but we have not found recorded an authentic case of anchylosis due to the immobilization of a tubercular joint.

Motion with traction followed necessarily; because no patient could endure motion without traction, unless anæsthetized.

A portative apparatus became a necessity, because patients treated by motion with traction died, unless they had the benefit of good air and sunlight.

The results of the use of the Davis and Sayre splints, or modifications of them, which are claimed as allowing motion, have not been published, although they have, in some form, been in use for thirty-three years.

Motion, as a factor of the treatment of disease of the joints other than the hip, has been universally abandoned; and there appears no good reason why it should be continued at the hip, or in tubercular synovitis of the knee.

Motion without friction between joint surfaces is obviously a mechanical impossibility.

The Taylor and Judson splints came to take the place of the Davis and Sayre splints because they permitted less motion at the hip-joint.

The results of the use of the Taylor splint as a portative apparatus leave much to be desired. It does not prevent rigidity, flexion, abduction, adduction, and shortening, either from erosion or subluxation.

All long traction-splints of which we have cognizance give interrupted instead of "continuous" traction during locomotion; and interrupted traction, while muscular spasm exists, implies motion.

Continuous traction can only be maintained by them by placing the patient in bed, or upon a patten (under the well leg) sufficiently high to prevent either the foot or the splint from reaching the ground. In practice this is not done.

All short splints that depend upon adhesive plaster, as other similar means for tractive power, fail to prevent intra-articular pressure and motion during locomotion, unless crutches and a high patten be used.

Continuous, uninterrupted traction relieves pain and aids the correction of the deformity in very many cases. In a few cases, however, it causes pain and muscular spasm; and there is much evidence that it can be dispensed with in all cases, provided fixation and removal of superincumbent weight be efficient.

Fixation is necessary in all cases; it must be continued without interruption until the inflammatory process has subsided; and the more perfect the immobilization the quicker and better the result.

Removal of superincumbent weight must be absolute from the beginning of treatment until the end of convalescence.

Thomas' splints, for the hip, knee, and ankle, are the most effective, known to the author, *for inducing fixation.* Many, however, have failed in using them, because they have caused their patients to walk about before the muscular spasm had subsided, because they frequently removed them to "test motion," and because they failed to use a patten sufficiently high (four to six inches).

The use of efficient fixative apparatus combined with a longer or shorter period of rest in the horizontal position, absolutely insures a cure, without other deformity than shortening in all joints except the spine; and in the spine it insures against any increase in the curvature, and a diminution and absolute reduction of the curve in very many cases, and, not infrequently, freedom from rigidity.

We are inclined to think that the dangers to the general health from confinement to the horizontal position have been exaggerated, and depend upon unfounded assertion and observation of cases treated without, or with but imperfect fixation.

In cases of hip disease, after a cure has been effected and the fixative apparatus removed, we favor the use of a modification of Dr. Taylor's Dows-splint, as more convenient and safer for young children than the crutches and patten.—*Med. Record*, Sept. 15, 1888.

Judson (A. B.) on a Practical Point in the Treatment of Potts' Disease of the Spine.—It is premised that the object of mechanical treatment is to make pressure on the projection with the threefold purpose of (1) enforcing fixation of the bones involved, (2) transferring pressure from the diseased bodies to the healthy processes, and (3) lessening the deformity. If we were dealing with the skeleton deprived of its integument, there would practically be no limit to the pressure which might be applied to the projection. But the interposition between the apparatus and the vertebral column of the sensitive skin places a peremptory limit to the degree of force which it is possible to apply. The rule may therefore read: The apparatus may be considered as having reached the limit of its efficiency if it makes the greatest possible pressure on the projection compatible with the comfort and integrity of the skin.—*N. Y. Med. Jour.*, Sept. 22, 1888.

Stillman (C. F.) on an Effective and Inexpensive Method for the Mechanical Treatment of Potts' Disease.—An inexpensive form of a brace constructed on the V principle is described and fully illustrated. The advantages claimed for braces constructed on this principle are:

1. They hold the spine rigidly in the erect position, and at the same time bring automatic spring pressure to bear at the seat of the disease, thus producing the very best conditions for rapid and complete recovery.

2. They are removable at pleasure, and can be worn over an undershirt, so that absolute cleanliness can be secured.

3. The power is adjustable, so that changes can be made during the different stages of the disease without the necessity of purchasing other apparatus.

4. They can be worn with perfect ease and comfort.

5. Those provided with acromial pads do not in the least constrict the thorax, but rather tend to increase its capacity by holding the shoulders back.

6. By their backward traction and forward pressure combined they retain the spinal column in a condition of absolute rest, and at the same time relieve the in-

flamed parts from the pressure of the superincumbent weight, and reduce deformity.—*N. Y. Med. Jour.*, Oct. 27, 1888.

Sayre (L. A.) on the Advantages of Plaster-of-Paris Dressings as a Means of Spinal Support.—The author describes a portable padded wire cuirass, which gives extension by thumb-screws attached to the foot-pieces, and counter-extension by a head-piece after the pattern of the jury-mast. In adults who are paralyzed and are too large for the cuirass, traction from head and heels by weight and pulley attachments is advised.—*N. Y. Med. Jour.*, June 16, 1888.

Ridlon (J.) on the Treatment of Rotary Lateral Curvature of the Spine.—For convenience of prognosis, and the consideration of the indications for treatment, lateral curvature may be divided into three stages:

1st. Curvature, without or with but slight apparent rotation, the spine being still flexible, and it being possible by voluntary muscular effort, passive manipulation, or posture to straighten the spine for a short time.

2d. When two or more segments of the spinal column are rigid and the curve cannot be wholly obliterated, but while there is as yet no complaint of pain or special weakness.

3d. When the second stage has existed for a considerable time and the curvature has progressed to a considerable degree, and there has come to be more or less pain and no little disability from weakness.

As to prognosis: In those of the first class the spinal column can be made straight and the muscles sufficiently strong to hold the patient habitually in the normal position. In the second class the progress of the deformity can be checked, the habitual position greatly improved, and the general appearance and carriage made much more graceful. In the third class of cases the pain is relieved or cured, the weakness disappears, and the general condition is improved; but the deformity remains, almost in its entirety.

As to treatment: All patients should have the best possible hygienic surroundings; they should be properly fed, and so clothed as not to increase the deformity or hinder its reduction. Clothing that can be supported at the hip should not be suspended from the shoulders; and the corsets should be arranged to accomplish this, and so as not to constrict the lower border of the ribs. The test applied by Mr. Bernard Roth is a good one: to attempt to fasten the clothing when heels, hips, shoulders, and head all rest against a door or wall. All cases should have certain exercises, to be discussed later, and when at rest should be so placed as to be in the position nearest possible to the normal.

As to supports, corsets, plaster-of-Paris jackets, and braces devised to correct, or help to correct, the deformity, it is a fair question if they are necessary or even unobjectionable in the first class of cases. The same may be said of the second class, but probably with less force. If apparatus be used, it should be light, elastic, and so arranged as not to constrict the chest in any way; and it should be a *progressive apparatus* that can from day to day be made to follow the changing outlines of the patient. Supports of annealed steel, felt, leather, plaster-of-Paris, woven wire, etc., are, in the author's opinion, contra-indicated in this class of cases.

In the third class a support is very often demanded to relieve the pain and sense of weakness, and to enable the patient to go about with a greater degree of comfort. Here less elasticity and more fixity are indicated than in the second class, the main object being to make the patient comfortable and to hold him so. Whether a support is used or not, patients are much benefited by a systematic course of baths, electricity, massage, and exercises. The principle, taught by Mr. Bernard Roth, of London, of exercising the patient in the "keynote" position, has a value which has not been understood or appreciated in this country.

The "keynote" position simply means the *best possible* position into which the spine can be brought by voluntary muscular effort of the patient for a very short time.—*Brooklyn Med. Jour.*, October, 1888.

Roth (B.) on Scoliosiometry; or an Accurate and Practical Method of Recording Cases of Lateral Curvature of the Spine.—The patient is placed in front of the surgeon, standing without shoes, with knees extended and feet together, all clothing having been removed to well below the iliac crests, so that the gluteal cleft is just visible. After inspecting the patient laterally and in front,

the trunk should be flexed as far as possible, the knees being kept extended, and the arms allowed to hang down loosely, so that the scapular muscles are roughly relaxed. I now take a tracing of the ribs posteriorly as follows: I feel for the lower angle of the left scapula, and, fixing one end of a pliable metal tape with my left hand at that point, I carefully mould the tape close to the ribs across the spine, to the lower angle of the right scapula, which is likewise to be carefully felt for. With the copying pencil, I mark the metal opposite the dorsal spine, and then carefully remove the tape, upper edge downwards, onto a sheet of quarto-size paper, and draw a tracing inside the tape. The pencil line is afterwards inked, and the tracing cut out and folded down the middle opposite the point marking the spine. A similar tracing is taken opposite the third lumbar vertebra.—*Brit. Med. Jour.*, Oct. 27, 1888.

Bissell (J. B.) on the Morbid Anatomy of Congenital Talipes Equino-Varus.—The specimens which form the subject of this paper were taken from a male infant with congenital equino-varus of both feet, who died of broncho-pneumonia at the age of five and one half months. The degree of deformity was almost extreme in the left foot, less marked in the right. The child had been under treatment by the traction method with plaster-of-Paris bandages since it was six weeks old. Both Achilles tendons had been divided five weeks before death.

The dissection showed the following distortions:

The fascia on the inner side of the instep and palmar surface of the foot was tense and contracted.

The ligaments crossing the ankle-joint and those between the tarsal bones were considerably altered. They were all more or less thickened and generally shortened. This was most marked in those on the tibial side of the ankle and those crossing the scapho-astragaloid articulation.

The bone-changes were very striking. They were confined practically to the three posterior bones of the tarsus,—the calcaneum, the astragalus, and the os naviculare. The changes in the cuboid were too slight to be of any moment either in causation or treatment.

The os calcis was altered slightly in direction and considerably in shape. An increase of one sixth its own length in so small a bone is important. This enlargement elongates the outer border of the foot. The curvature of the outer aspect of the bone adds to this, and thus accounts, partially at least, for the incurvation of the distal half of the foot. The corollary of this is that the calcaneum forms a powerful obstruction to the reduction of talipes varus. The deformity of the scaphoid was well marked. The thinning of its outer half, its increase from side to side of nearly one third its width, its firm and close attachment to the inner malleolus, and its articulation on the inner side of the astragalus are important points to be considered in the treatment of these cases. The relations of the scaphoid bone to the tibia and astragalus explain to my mind many of the cases of failure after treatment in which the bad result was said to be due to the "inherent tendency to relapse."

The astragalus was greatly changed. A striking peculiarity was the increase in the width of the bone at the point where the neck arises from the body. This is the narrowest part in the normal bone. The body was very large and the trochlea broadened and increased. The neck arises from the body of the bone at a very oblique angle. To appreciate the amount of distortion in this obliquity it is necessary to know the normal relation of the neck to the body at this period of life. In astragali taken from fourteen undeformed feet in infants between the ages of four and one half and six months, there was found considerable variation in the measurement of this angle. The smallest angle was twenty-one degrees, the greatest thirty-eight, and the average about thirty.

The following conclusions are drawn:

1. The shape of congenital equino-varus is due primarily to bone-changes.

2. The varus is due to the elongation of the calcaneum, to the excurvation of its outer face, to the extreme obliquity of the neck of the astragalus, and to the distorted position and shape of the scaphoid.

3. The equinus is due to the great increase in the depth of the anterior portion, and to the thinness of the posterior extremity of the astragalus.

4. The deformed foot is also *retained* in its abnormal position by the alterations in the ligaments, tendons, and fascia, these alterations being secondary to the changes in the bones.—*Arch. Pediat.*, July, 1888.

THERAPEUTICS.

Wight (J. S.) on the Action of Carbonate of Lime and Bromide of Arsenic.—In the treatment of both inflammatory and non-inflammatory new formations, I have given these remedies separately, as well as in conjunction. I have given the carbonate of lime with a bitter tonic before meals, and the bromide of arsenic after meals. The dose of the bromide of arsenic has been one-fortieth or one-twentieth of a grain. The dose of the carbonate of lime has been from five to twenty grains. Prepared as well as precipitated chalk has been used; but for the most part I have used prepared chalk. The results obtained by these two remedies in conjunction have been superior to the results following either when given without the other.

I have given these remedies in the following cases: 1. In different forms of inflammatory enlargement, some tending to suppuration, and some tending to induration. 2. In those enlargements that are on and near the boundary line between benign and malignant formations. 3. In those growths that have been called sarcoma and fibro-sarcoma, as well as adeno-sarcoma. 4. In cases of cancer. 5. I have also used them in the treatment of elephantiasis.

The leading idea in the therapeutics of these remedies is that they have more or less power to destroy morbific microbes; and I have given them on the theory that cancer, sarcoma, and benign growths are caused by special microbes that act as irritants, producing specific proliferations. The specific proliferations and the special microbes together make up the mass of the so-called new growth. And I may add that I am more and more convinced that this theory may turn out to be true, when our knowledge has sufficiently advanced.

The results that I have up to the present obtained are very encouraging; in cases of inflammatory induration the improvement has been rapid and marked, as a rule. In some cases which have partaken of the nature of sarcoma, complete absorption has taken place in a few weeks. Cases of fibro-sarcoma have disappeared in a few months. One case of elephantiasis has been especially benefited by this plan of treatment, combined with the local use of mercuric chloride wash. Several cases of cancer in the last stage have been relieved, and the growth has been made slower. In one case of cancer the bromide of arsenic greatly lessened the pain for months. In another the local hemorrhages appeared to cease under its influence. In a case of cancer of the stomach the pain was much relieved and the appetite and digestion improved.

I have used other preparations of arsenic in the past, but, as far as I can now judge, the bromide of arsenic is the most desirable preparation. It has up to the present given me the best results. About two years ago I treated a patient for boils; my treatment was on general principles, and my patient did not get better. A man told me that he had known pulverized egg-shells to cure such a case. I tried the carbonate of lime, in the form of prepared chalk, and my patient recovered. Since that time I have extended the use of this remedy, and have found it to be valuable. One case of carbuncle in a woman of advanced years was made very mild by the use of carbonate of lime. I have given this remedy in two cases of diphtheria, which it appeared to arrest.

Let me add, with his permission, that Dr. Bates, of Brooklyn, has found a new microbe in cancer tissue, and has succeeded in cultivating it.—*Med. and Surg. Reporter*, Dec. 1, 1888.

Harris (C. H.) on Chloroform Anæsthesia and Narcosis as a Remedy in Cerebro-Spinal Meningitis.—A boy of 7, unusually sprightly and precocious, was taken ill November 11, 1888. The symptoms were severe headache, slight convulsions, extreme downward deviation of the eyes, and slight stiffness of the dorsal muscles. Temperature, respiration, and pulse were normal.

The patient was found to have extraordinarily large external genitals; the penis was rigidly erect, and terminated in a long, tightly phymosed prepuce. The spasm looking somewhat like an orgasm, the child's trouble was thought to be reflex, and due to phymosis.

The doctor lost no time in chloroforming and circumcising him. As soon as he came under the chloroform, which was pushed to complete anæsthesia, every symptom disappeared as if by magic, and there were no fears or anxiety about the patient for five days. The wound was almost healed, and the boy apparently in a fair way for recovery. On the evening of the fifth day, the

doctor was hurriedly called to him, and immediately recognized the real nature of the case. Wild delirium, flaming eyes more tensely drawn than ever, extreme opisthotonus, head and heels nearly touching, labored breathing, elbows drawn back, hands clenched, high and varying temperature, rapid and irregular pulse—in a word, all the array of nervous symptoms in full force, and stamping it a typical case of meningitis. For five days the disease had lain dormant. The delirium was supplanted by coma, which rapidly deepened, and in two days ended in death. In this short time destructive inflammation of one eye took place, resulting in perforation of the cornea and shrinking of the ball.

The author is convinced that this was a case of meningitis from the beginning. The chloroform undoubtedly arrested its progress for nearly five days. He says: "Had I diagnosed correctly at first, and repeated the chloroform *inhalations* daily to the extent of producing several hours of sleep each day, I have a deep conviction the result would have been different."—*Atlanta Med. and Surg. Jour.*, Dec., 1888.

Ross (T. H.) on the Effect of Antipyrin on the Secretion of Milk.—The author was called October 27, 1888, to see a woman who had taken her child (sixteen months of age) from the breast the previous evening, and at the time of his visit was experiencing much pain and discomfort from the distension of her breasts. He ordered the breast-pump applied, which drew off eighteen fluid-ounces of milk. He also ordered eight grains of antipyrin three times daily. At 3 P.M., eight fluid-ounces of milk were drawn with the pump.

October 28th, 9 A.M., six fluid-ounces, and at 6 P. M. three fluid-ounces were drawn.

29th. 9 A.M., two fluid-ounces, and at 6 P.M. one fluid-ounce were drawn.

On the 30th, no milk in breasts. And the medicine was discontinued.

Pain and discomfort disappeared after the first dose of antipyrin. No change was made in the previous rather generous diet. The appetite and digestion remained good.—*Med. News*, Dec. 8, 1888.

Carr (W. P.) on Boiled Silkworm-Gut Sutures.—The author thinks that silkworm-gut is the nearest approach to perfection of any animal suture known.

1. It is not injured or changed by prolonged boiling, nor by long immersion in aqueous antiseptic solutions, and may therefore be easily sterilized by boiling, and kept aseptic in wide-mouthed phials of sublimate or carbolic-acid solution.

2. It is as strong as silk, and after soaking, nearly as pliable, is freer from twisting and kinking, and easier to pass through the needle's eye than either silk or catgut.

3 It resists absorption longer than other animal tissues.

4. It is easy to tie, and the knots, if well tied, never slip.

5. It may be split into fine threads for delicate work, and is obtainable when desired in lengths of eighteen or twenty inches.

It has been used with great satisfaction for perinæorrhaphy, trachelorrhaphy, and other operations, the gut used having been boiled for an hour, and the union in every case having been perfect, and entirely without suppuration.—*N. Y. Med. Jour.*, Dec. 1, 1888.

Sutherland (H.) on a Case of Insanity from Opium Poisoning.—The patient, a woman of fifty, was admitted Aug. 16, 1888. Twenty years ago the patient had acute albuminuria, which gave her much pain, and first induced her to take opiates as sedatives. This habit continued, and increased gradually till the whole moral character appeared to be undermined. The patient, who had been previously most accurate about money matters, became not only careless, but reckless and dishonorable. She ultimately on several occasions forged the name of her daughter, who had funds invested in safe railway companies, for transfer of the stock into various risky investments, which have since turned out complete failures. She has gambled inordinately on the Stock Exchange, her liabilities at one time amounting to not less than a million of money. The relatives, after having endured all the inconveniences of a borderland case for six years, were at length able, five days only before admission, to place her under certificates and proper control. First, with regard to the sale of poisonous drugs, the chemists' bills were produced. From one of them it was ascertained that intermittently for six years past the patient had bought and taken preparations of opium equivalent to about eight grains a day. But, in addition, another chemist supplied a similar quantity, which the relatives had every reason to believe was also

taken during the day. The patient consequently had consumed habitually not less than sixteen grains of opium during the day intermittently for six years. After losing flesh gradually from the anorexia produced by the opium habit, and having bored her relatives by her eccentricities for some months, she became suddenly acutely delirious, dashing her limbs about in an aimless manner, and behaving with violence to all who approached her. She had the delusions that she was going to be poisoned, that red-hot irons were placed in her bed, and that she had been bitten by a dog, with many others. She had lain in bed for six weeks previously to the attack for no reason whatever. During the first ten days—from Aug. 16th to the 26th—the pulse was so feeble that although the patient slept only from half an hour to three hours every night, it was not deemed advisable to administer any sedative. On the 26th a marked improvement took place, owing entirely to the fact that the patient had taken food well as soon as the opium had been cut off. The pulse became stronger and more normal, and chloral, morphia, bromide, and ultimately paraldehyde, were given in succession with great caution, until on Sept. 10th six hours' sleep were registered. From that time till Oct. 8th she gradually improved, and was discharged on that day, on leave of absence, "relieved."

The moral of the story is that the present system of allowing patients day after day to buy at a chemist's shop extraordinary quantities of sedatives for their own use, or for any other purpose, is a disgrace to our Legislature, and that stringent measures ought to be at once taken to rectify or enforce any law which may exist on the subject.—*Lancet*, Nov. 17, 1888.

Wilson (J. C.) on the Causes and Prevention of the Opium Habit and Kindred Affections.—The causes may be grouped under three heads: First, example, as is shown in the case of those who become opium-eaters through the example of friends. Second, suggestion, as is shown in those who fall into this habit through the reading of literature concerning it, or from familiarity with the drug, as is the case of doctors, druggists, nurses, and students of medicine. Third, medical prescriptions. It is an unfortunate fact that the greater number of victims of the habitual vicious narcotism become so through the prolonged abuse of narcotics originally prescribed for the relief of pain.

Among the measures suggested for the prevention of the formation of such habits, were, first, the dissemination of a wholesome knowledge of the methods by which the opium habit and other kindred affections are induced; of the serious character of these affections, and of the danger attendant upon an ignorant and careless employment of narcotics. Second, a reasonable and temperate presentation of the facts in the popular works upon hygiene. Third, the exercise of every possible precaution on the part of the physicians in prescribing narcotics. It is good practice to keep the patient in ignorance of the character of the anodyne used and of the dose. Physicians should personally control, as far as possible, the use of such drugs, and see that they are taken infrequently and in the minimum amounts capable of producing the desired effect; the occasional alternation of anodyne medicaments is desirable. Prescriptions for drugs of this kind should not be renewed by druggists without the written order of the physician. Finally, a merely palliative treatment should not be allowed to assume too great importance in the management of curable painful affections.

Under no circumstance, except in the final stages of hopelessly incurable painful affections, should the hypodermic syringe be placed in the hands of the patient.

Uniform and efficient laws to regulate the sale of narcotic drugs are desirable. Existing laws, relating to this subject, are a dead letter; they are neither adequate to control the evil, nor is their enforcement practicable.—*Med. Record*, Nov. 24, 1888.

Expectant Treatment!—A Texan thus writes to the *Kansas City Medical Index*, Oct., 1888:

"I am now treating typhoid fever successfully with a battery (made by the —— —— —— Co., of ——) and find that electricity can be used as an antipyretic and anti-phlogistic, and is superior to any agent I have been able to find in my practice of fifty years. I am using it side by side with antipyrine in the hands of others, without either medicine or stimulant. I am ready to attack any continuous fever in any city, if I can select my batteries.

"I have no doubt that dengue and yellow fever may be made subject to this agent."

If this is a bit of Western humor, very well; if the writer is in earnest, it is an extraordinary example of what "fifty years" of practice may do in a sunny clime. Had a few hours of these "fifty years" been devoted to reading, they would have taught the sanguine writer that a statement of what kind of electricity and how applied would interest readers, and also why a battery made by —— —— —— Co., of ——, yields up a more "antipyretic" and "anti-phlogistic" current than any other.

Bombaugh (C. C.) on the Multiplication of Useless Drugs.—In dealing with this subject, the author referred to the continually increasing unwieldiness of the U. S. Dispensatory. The index of the fifteenth edition extends through seventy-six three-columned pages, embracing about seventeen thousand names of medicinal substances. Deducting one third—a liberal allowance—for repetitions, there are in round numbers, eleven thousand. Of this number, he thought that ten thousand could be transferred to the *index expurgatorius*, without being seriously missed. Of the three hundred and twenty-four constituting the primary list, it has been shown that one hundred and eight,—one third—are very active, one hundred frequently do their work, and one hundred and sixteen are untrustworthy. In the sixteenth edition of the Dispensatory there is an addition of fifteen pages to the index, a total of ninety-one pages. The editors intimate that they have discarded some of the material they considered "effete," so that although they added six hundred pages, the net increase was only one hundred and sixty-seven pages. As it is time to commence the discarding process and throw overboard the rubbish, this preliminary aggressive movement on the effete is most welcome. There is an irruption of newly-discovered medicine and newly devised combinations which demands arrest. The only ground for tolerance is that now and then one comes to stay with the stamp of authoritative approval.

The writer adverted at length to the declining sovereignty of empirical conclusions, and the coming reign of pharmacology, which is concerned with the action of drugs on the healthy body. The time has come for future dependence upon experiments with medicinal agents upon animals. Among the reasons for hastening the coming revolution is increasing recourse to remedial measures other than the administration of drugs. More and more reliance is placed by the practitioner upon such agencies as the electric current, massage, dietetics, treatment of systemic conditions or diatheses, germicides, antiseptics, disinfectants, the sanitation of State medicine, the prophylaxis of preventive medicine; but while we are grateful for these acquisitions, and while we welcome additional contributions to a list of positive medicines, which is conspicuous for insufficiency, let that gratitude and that welcome be a standing protest against mere numerical preponderance.—*Boston Med. and Surg. Jour.*, Nov. 29, 1888.

BOOK NOTICE.

The Vest-Pocket Anatomist.—(Founded upon "Gray.")—By C. Henri Leonand, A.M., M.D. 14th revised edition. Detroit: The Illus. Med. Jour. Co.

The extraordinary success achieved by such little works as that now before us—a source of "surprise and pride" to its author—is calculated to inspire in all those interested in the production of medical scientists, any feeling other than that of pleasure or of hope. When it is by aids such as these that our students are enabled to pass examinations, it would seem to be evident that our system of tests for medical knowledge must be very seriously at fault. It may be contended that these aids, Quiz Compends, etc., are but means of recalling in a condensed form to the mind of the student the main facts of a subject which he has elsewhere completely mastered; in other words, that they are but aids to memory, instead of presentation of all that the student is required to know. If this be their function, it is indeed very ill-fulfilled, for the facts presented are badly arranged, selected without any regard to their importance, and there is an over-abundance of facts that no student who has ever studied the real text-books requires to have recalled to his mind, such as that the larynx is the organ of voice, or the stomach an organ of digestion.

But the use to which such books are most frequently put is not as aids to text-books, but as substitutes for them; and it is against them in this latter capacity that our chief complaint lies. Condensation and abbreviation can be employed by the student with advantage only when made by himself from facts with which he is already acquainted. The condensations and generalizations made by others from facts with which he is unacquainted must be perfectly meaningless to him, and only to be learned in a parrot-fashion, enabling him, doubtless, to pass examinations as they are ordinarily conducted, but affording to his mind in acquiring them neither pleasure nor culture. G. K.

THE MEDICAL ANALECTIC

A WEEKLY EPITOME OF PROGRESS IN ALL DIVISIONS OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY R. W. AMIDON, M.D.

With the active collaboration of

CHARLES H. KNIGHT, M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, Throat Department; GEORGE B. PHELPS, M.D., Attending Surgeon, Chambers Street Hospital, Out-Patient Department; A. T. MUZZY, M.D., Assistant Surgeon to the New York Eye and Ear Infirmary; JOHN RIDLON, M.D., Attending Orthopedic Surgeon to St. Luke's Hospital; CONDICT W. CUTLER, M.D., Instructor in Diseases of the Skin, Post-Graduate Medical School, New York; JOHN S. HAWLEY, M.D., Attending Gynæcologist, New York Hospital, Out-Patient Department; FREDERICK PETERSON, M.D., Lecturer on Nervous Diseases at the New York Polyclinic.

VOL. V., NO. 52. December 27, 1888. WHOLE NO. 100.

CONTENTS.

	PAGE
Original Article	617
Therapeutics	622
Medicine and Pathology	626
General Index	629

ORIGINAL ARTICLE.

BY CHARLES A. POWERS, M.D.,
Surgeon to Out-Patients, Chambers Street Hospital.

Practical Observations on the Diagnosis of Fractures of the Upper Extremity.[1]—During the seven years ending with January 1, 1888, 87,418 patients were treated for recent injuries in the out-patient department of the Chambers Street Hospital; of these, 4,933, or little less than six per cent., were walking cases with fracture.

These figures approximately show the relative frequency of ambulant fractures in dispensary practice. In private practice the proportion would be considerably increased, for the requirement of a fee keeps away a great many of the lesser injuries which so overcrowd our metropolitan dispensaries.

The accepted evidences of fracture are pain, local tenderness, ecchymosis, disability, swelling, deformity, crepitus, and a false point of motion; and the recent medical graduate, fresh from his studies, confidently expects all to be plainly marked in every case. In point of fact, but few cases do present this complete train; in some, one only may be found; *e. g.*, the case of a boy of ten years who presented himself at my clinic with a transverse fracture at the lower end of the radius, a false point of motion being absolutely the only evidence gotten. Many of these symptoms may be present in a given injury where no fracture exists.

A severe contusion often gives rise to great pain, a local area of exquisite tenderness, ecchymosis, complete disability, and a considerable degree of swelling; while the swelling may in itself simulate the deformity which might be present in case there were a solution in the continuity of the bone beneath.

About joints a crepitus may be occasioned by synovial or hemorrhagic effusions as well as by the presence of arthritic adhesions.

The rubbing together of the thickened surfaces of the bursa between the deltoid and the capsular ligament of the shoulder joint produces a crepitus which is often misleading, and I have more than once known a physician to consider the creaking in a tendo-synovitis positive evidence of a fracture of one of the bones of the forearm.

A false point of motion, when it really exists, can arise from nothing except a solution of continuity in the bone itself; but in many cases, especially in the neighborhood of joints, it is a matter of extreme difficulty to elicit this. If the swelling be excessive, one can hardly feel the bones beneath, while if the patient be very fat, the soft parts themselves give a yielding sensation which is quite perplexing.

The manner in which the injury was received is in itself of some importance. Thus we know that a Colles' fracture very generally results from a fall upon the extended palm, while the neck of the radius is seldom broken unless by direct violence; but I have often been surprised at the patients' ignorance regarding their injury; they will generally say that they "fell and struck somewhere"; often they do not know how they were hurt.

[1] Abstract of a paper read at a stated meeting of the Hospital Graduates' Club.

In any doubtful case, then, one must carefully weigh these evidences, assigning to each its proper value, and I am free to say that, with certain exceptions which I shall hereafter note, well located crepitus and a false point of motion are the symptoms upon which I think chief reliance is to be placed.

It is almost needless to assert that, in examining a case for fracture, it is well for one to begin his investigations at a considerable distance from the apparent seat of injury, thus making sure that there is no additional lesion.

In speaking of the various fractures of the upper extremity, one can dismiss those of the shaft of any of the long bones with a word, for the evidences are almost invariably well marked. In the middle of the clavicle, shaft of the humerus, or in both bones of the forearm, deformity is very generally present, and a point of local mobility can easily be elicited; so also can crepitus be felt, unless, perchance, the bones overlap or soft tissues be interposed.

If the shaft of radius or ulna be broken deformity is generally absent, but by grasping one part of the bone firmly and forcibly "rocking" the other, false motion and crepitus will almost always be obtained without difficulty.

The acromial extremity of the clavicle is often broken, the sternal end very seldom.

Of 416 cases of fracture of this bone treated in the out-patient department of the Chambers Street Hospital during the past nine years, 209 were in the middle two-fourths, 12 at the inner quarter, 143 at the outer quarter, while in two cases the seat was not stated.

Of the 12 cases in which the sternal extremity was the seat of the injury, 3 presented marked deformity, the inner end being drawn upward; in 3 there was slight deformity of the same character; while in 4 there was no appreciable deformity; and in 2 the symptom is not mentioned.

In all, however, crepitus and false motion were plainly marked.

Wherever the seat of injury in this bone may be, I have found it useful to hook the fingers over and above the clavicle and carefully but forcibly drag down on it. If a fracture be present the patient will indicate the point of his most acute pain, while if there be only a contusion at either end, pain is not apt to be elicited unless the pressure be made directly over it.

The few cases of fracture of the sternal end which have fallen under my notice have been readily made out, while most obscure cases of injury at the outer extremity present themselves daily.

We are told by some authorities that if the fracture be between the conoid and trapezoid ligaments there will be no deformity, as the fragments will be held in place by these structures, while if the fracture be outside the trapezoid the outer fragment will tend to place itself at a right angle with the inner.

Of the 143 cases of fracture at the outer fourth of the clavicle above alluded to, in 84 there was no deformity, in 39 there was a slight drooping of the shoulder, in 7 there was marked deformity, the inner fragment being drawn up and over-riding the outer, while in 13 cases the symptom was not mentioned.

My own observations tend to show that if the fracture be without the clavicular insertion of the conoid ligament there will, as a rule, be no other deformity than that due to swelling, with the possible addition of a slight drooping of the shoulder.

In these injuries at the outer end, crepitus and false point of motion are the only symptoms on which I rely. Here, notably, a contusion occasions severe pain and local tenderness, as well as ecchymosis, while a smart blow on the deltoid is quite likely to cause disability at the shoulder.

The idea that a patient with fracture of clavicle cannot put his hand on his head, while ability to do this bars out the possibility of such fracture, I think to be positively erroneous.

I have repeatedly seen patients with a plainly marked fracture easily place the hand on the head; I have as often seen patients in whom competent surgeons agreed no fracture existed, fail to do this. It is a symptom of slight value.

In eliciting the crucial evidence of crepitus and false motion, I have found it best to abduct the arm to about 60 degrees, thus relaxing the fasciæ, deltoid, and superior acromio-clavicular ligaments which serve somewhat to hold the fragments in place while tense.

Then placing the fingers of one hand upon the upper surface of the clavicle one half to one and a half inches from its outer end, and the fingers of the other hand just outside of this, alternately pressing up and down, and adding circumduction of the

humerus. If the patient be exceptionally thin one may grasp the clavicle antero-posteriorly and "rock" it.

Of fractures of the scapula I have seen but four: two through the middle of the body, easily recognized; one through the surgical neck, in which one could immobilize the coracoid process, anterior angle, and head of the humerus, and move the rest of the scapula upon these points, and one through the superior angle, in which one could immobilize the body of the bone and on slipping the fingers beneath this angle elicit the local mobility and crepitus.

During the past nine years 327 fractures of the humerus have been under treatment. These were located as follows:

Anatomical neck	20
Comminuted fracture of the head	1
Through great tuberosity	1
Through both tuberosities	1
Through both tuberosities with subglenoid dislocation	1
Through the surgical neck	40
Shaft	92
Through the condylar base	41
External condyle	53
Internal condyle	63
T-shaped	10
V-shaped	3
Not stated	1
	327

Of the fractures of the internal condyle two were accompanied by dislocation backward and outward of both bones of the forearm, while in one case of fracture of the external condyle, the same complication occurred.

In examining the shoulder after injury one must first exclude dislocation of the humerus, which can generally be quickly recognized by its well marked signs of subacromial depression and abnormal position of the head of the bone; then the diagnosis probably rests between contusion or sprain, and fracture.

With the thumb in the axilla, pressed well up on the head of the bone, and the fingers brought around so as to grasp the head just below the acromion, one may almost always ascertain whether the head rotates with the shaft. If the head does not rotate one must seek the exact location of the false motion and crepitus by a process of exclusion.

Pick ("Fractures and Dislocations," p. 172) believes fracture through the anatomical neck to be generally impacted, in which case diagnosis must necessarily be extremely difficult unless the head be held and the impaction broken up by rotation. Of the 20 cases above mentioned impaction is noted in but one, and in none of the dozen cases which I have myself seen has it been present.

About no joint is crepitus so deceptive as at the shoulder. We not infrequently find, in patients who have been troubled with rheumatic arthritis, a diffuse, harsh crepitus, simulating very closely that which is obtained by rubbing together two freshly broken bony surfaces. In these cases the other shoulder is often affected also.

Old people are very prone to have stiffness about the shoulder joint; and in fact most of the joints of people over sixty years of age seem to be fruitful fields in yielding crepitus.

Ecchymosis at the insertion of the deltoid is given by some writers as an evidence of fracture at or above the surgical neck. I have seen it in but two cases. If the fracture be intra-capsular it could hardly be present, and I can see no reason why a severe contusion of the shoulder, with rupture of the terminal branches of the circumflex arteries, should not occasion it.

It is well to make no positive diagnosis of fracture above the surgical neck unless the patient is under an anæsthetic.

In examining the region of the elbow joint one should first exclude a dislocation of one or both of the bones of the forearm by making sure that the bony prominences bear a proper relation one to the other. If they are in place there can be no dislocation; but there may be a fracture of either of the condyles, the fragment being held in place by fasciæ and muscles.

The olecranon should first receive attention, and if it be broken the condition will generally be plainly apparent. The upper fragment will be drawn up by the triceps; there will be a perceptible depression beneath it, and there will be, as a rule, inability to extend the forearm.

These evidences especially obtain when the constricted neck at junction of shaft with olecranon be the seat of fracture; but if only the tip of the olecranon be broken off, these symptoms will be absent. Then one must carefully immobilize the olecranon itself, and seek the false motion and crepitus by forcibly "rocking" the tip on the body.

"By firmly grasping the humeral shaft with one hand and seizing the condyles transversely, 'rocking' the lower part strongly on the upper will determine whether the condylar portion is attached or detached. Each epicondyle and condyle may in turn be subjected to a like manipulation. Should the base be broken off, one condyle must be rocked upon the other to determine the presence of three or more fragments.

"If much swelling be present, it is not easy to grasp the condyle; yet I have found that steady, firm pressure will sink the fingers until they reach and hold the bony points. Swelling obscures the outer condyle to a much greater extent than the inner. Even though the effusion be great, I have never had difficulty in grasping the latter.

"The examination is always more satisfactory when made under an anæsthetic, and it should be administered in all cases of doubtful diagnosis, or in those in which it does not seem advisable to subject the patient to the necessary pain.

"Joint crepitus at the elbow is very misleading; when there is a moderate plastic exudation, one articular surface grates upon the other in a most deceptive way. This can sometimes be obviated by having assistants hold the bones apart, but even then the force necessarily used in 'rocking' the bony parts jars the joint.

"In these cases an anæsthetic is indispensable, and even with its aid diagnosis may be obscure.

"I have of late seen several such elbow cases, which presented themselves without luxation, yet in which, under ether, the bones of the forearm were very easily thrown backward, leaving the lower end of the humerus to project anteriorly, and capable of thorough and satisfactory examination."[1]

The head or neck of the radius can hardly be broken, except by direct violence. Cases are recorded in which a fall upon the hand has resulted in fracture here, but these, I think, must be regarded as surgical curiosities. Unless the patient be very stout or the parts greatly swollen, the head of the radius can be grasped between the thumb and forefinger; then by pronating and supinating the forearm one can ascertain if the head of the bone rotates. If it does not rotate, there is of course a fracture, and exclusion of the shaft traces the seat to the upper extremity of the bone.

In fracture of the radial neck inability to supinate is of some corroborative value.

The pronator radii teres will pronate the forearm, but as the supinator brevis is inserted just at the seat of the fracture it is necessarily disabled. Crepitus can be obtained, as a rule, but one should carefully bar out a joint crepitus, and especially the "click" which attends a subluxation of the radial head, and which, as Mr. Jonathan Hutchinson says (*Annals of Surgery*, vol. ii., p. 91), is often mistaken for evidence of fracture.

Injuries about the wrist are of great frequency; their accurate diagnosis often most difficult. In well marked cases all evidences may be present; in some almost all are absent.

In examining one may well proceed as follows: History of the injury, was it a fall upon the palm? Careful inspection for characteristic deformity, both antero-posterior and lateral. If this deformity be present and well marked it is of great value, but if slight it is not pathognomonic, for rupture of the internal lateral ligament of the wrist may allow the hand to be carried to the radial side, while the "silver fork" appearance may be occasioned by diffuse swelling at the back of the wrist, that in front being bound down by the anterior annular ligament, which allows swelling in the sheaths of the tendons above and below it. I have often seen the posterior carpal fold and anterior carpal furrow thus produced by swelling due to contusion and sprains alone. One may carefully palpate the lower end of the ulna through its styloid process, and thus eliminate fracture there.

It is at the lower end of the radius that perhaps our greatest doubt arises, and here I think the following manipulation of use: Firmly grasp, with the left hand, the shaft of the radius some two or three inches above the carpus; then with the other firmly grasp radius antero-posteriorly just above the carpus.

There is a prominent tubercle[2] at the

[1] From a paper by the Author on "The Treatment of Fractures at the Lower end of the Humerous." *Medical Record*, vol. xxxiv., No. 25.

[2] It is more than possible that attention has previously been called to this tubercle, but I am unable to find mention of it. It can be felt beneath the skin at the back of one's own wrist. I have found it to possess a very great diagnostic value.

lower end of the radius, posteriorly, without and within, which pass, respectively, the tendons of extensor carpi radialis brevior and extensor secundi internodii pollicis. In the average patient this can be plainly felt, and when one has his forefinger on this and his thumb opposite on the anterior surface, he may be sure that he has the radius, and at its lower end. Just below this he may feel the radio-carpal articular crease.

Now by firmly "rocking" these parts to and fro, one can almost always break up impaction if it be present, and if it be advisable to break it up (and it is I think advisable in most cases, unless the patient be aged); if there be no impaction false motion is comparatively easily obtained. Crepitus, at the lower end of the radius, is not always present, and I am free to say that, in a certain set of cases, deep-seated pain and tenderness are the only symptoms.

These latter I now treat as impacted fractures, for in some cases I have sent them away with directions as to rest, massage, etc., only to have them return in two or three weeks with characteristic deformity and other symptoms of bony lesion.

I believe, however, that one can almost always make out a fracture in this region, and if it be very oblique he can approximately appreciate its degree, while he can say if it be transverse or nearly so. Between these, however, it is very difficult to accurately estimate the degree of obliquity.

If there be much swelling one can here, as at the elbow, by slow, firm pressure sink the fingers down to the bone, and thus grasp it above and below.

Approximately one may estimate a fracture of the styloid process, or a longitudinal fracture, in the same way; he must be absolutely sure that he has grasped the various parts of the lower end of the radius, and he must use force.

The "chipping off" of the posterior angle of the lower articular surface, which is known as "Barton's fracture," is by no means easy of recognition. I have best found it by partially palmar-flexing the hand, and then pressing up and down on this angle. A direct blow on the posterior surface of radius, when the hand is palmar-flexed, has been the injury in most of the cases which have fallen under my observation.

Fracture of a metacarpal, or phalanx, may be known by false motion or crepitus alone or combined; these here, as above, may best be elicited by firmly grasping the bone in various places and "rocking" it back and forth, being careful that one's evidences are without a joint.

In all cases in which swelling is so extensive as to render intelligent palpation impossible, one must await its subsidence, and I have found in simple fractures cotton, firm bandaging, and rest the best measures for the promotion of absorption.

I have not spoken of measurements, for I think them of little real value. They are obviously so when circumferential, for contusions may give equal enlargement. That there is generally a difference in the length of the upper extremities is shown by repeated measurements, and if, after injury sufficient difference be present to be of value as a point in diagnosis, other and more valuable evidences must necessarily be found.

My friend Dr. J. Gardner Smith and I have made careful measurements in 449 men, who gave no previous history of fracture. In 98 we found the limbs of equal length, in 243 the right was the longer, in 108 the left exceeded the right in length. The difference ranged from one eighth of an inch to one and a half inches, the greater number showing a difference of one fourth to three eighths of an inch. I make measurements as a matter of interest, but place little dependence on them in diagnosis.

Measurements of the humerus are well made between the deltoid tubercle on the scapular spine above, and the tip of the olecranon below, the elbow being held at a right angle. Whenever measurements are made, it is well to fix the bony points on either side by an ink dot on the skin over them, and it is well for two or three to measure and compare results.

"Picking out" the seat of fracture with some point, like that of a lead pencil, has been said to be of use. I have not been able to find reference to this procedure, nor do I recall who suggested it to me, but will simply say that I have not found it of value. The theory is that if one "pricks" along the course of a bone with such point, the patient will indicate great pain just as the point is at the seat of the fracture. I have tried it repeatedly, but with negative results.

Dr. J. R. Conway, Jr., of this city (*N. Y. Medical Journal*, vol. xlii., p. 632) recom-

mends the injection of a 4-per-cent. solution of cocaine as being of value in the diagnosis and reduction of fracture, saying that it renders examination painless. I have had recourse to it in but few cases, perhaps eight in all, but have found it perfectly ineffectual in all but one case, and in that I attributed relief more to the "moral effort" than to the action of the drug. My own experience has been too limited, however, to be of value on this point.

In dispensary practice I fear we pay but little attention to the suffering which our patients undergo, being only too well pleased to find the fracture which we seek, confirm and have confirmed our diagnosis without thought of the agony which every move inflicts. In private practice ether is necessary in many cases, and in all in which doubt exists this anæsthetic should be given. Should the surgeons then fail to agree as to the presence or absence of fracture, the case should be treated as a fracture.

Finally, follow the classic rule and in all cases compare the part with its fellow; but one must remember that symmetry does not prove the absence of fracture, neither does asymmetry show positively its presence. One should always inquire regarding previous fracture in the suspected locality.

Let me emphasize two points which have been of value in my own work: use, carefully, all needed force in the examination, and rely chiefly on bony crepitus and false mobility.

THERAPEUTICS.

The Dawn of Reason in England.—Nothing could be so well calculated to convince the worst pessimist that the world still moves, and that right will triumph, as the perusal of a recent leading article in the *Lancet*, entitled "Chloroform as a Routine Anæsthetic."[1] It is truly gratifying to welcome this awakening in England to the dangers of chloroform, but it is deplorable to think at what a cost of human life this lesson has been inculcated. It is with a full knowledge that the example thus set abroad may well be followed by practitioners in some sections of our own country, that the "confession" is appended n full.

"How deeply men's minds are interested in the question, 'Which is the safest anæsthetic?' has been amply shown by the prolonged correspondence which has followed our leading article dealing with the subject. We regret that pressure upon our space has prevented a wider discussion. At least two most opposed views are held by those who regard chloroform as a safe—nay, the safest—anæsthetic: holders of the one view contend that the less instructed the chloroformist is, the better for the patient, provided he neglect the pulse, and, watching the respiration, drag the tongue forward with artery forceps if any sign of respiratory trouble occurs; those who favor the other view, which has been advanced most recently by Mr. Foy, of Dublin, assert that a large percentage of chloroform deaths are due to maladroit chloroformization. But, as we pointed out, the danger of chloroform lies in the fact that a little carelessness on the part of the administrator will lead to fatal results. Ether, when administered by itself, has many disadvantages; but disadvantages are preferable to dangers, and so it seems desirable that it should oust chloroform as a routine anæsthetic, the latter agent being reserved for special individuals. When it is admitted, as we are glad to see it is, even by the strongest advocates of chloroform, that the utmost care is needed in its administration, our main contention is supported—viz., that were any casualty to occur under its influence, it would become the duty of the coroner to inquire whether due care had been exercised in the choice of the best anæsthetic for that individual case, and whether proper care had been taken in the administration of the anæsthetic selected. It is not, of course, germane to the question to contend that many coroners' juries are incompetent to settle such weighty questions. Their inefficiency is equally likely to be shown in the conduct of an inquest upon any case of poisoning."

Eddowes (W.) and Jackson (A.) on Large Doses of Morphine.—The case in which the drug was administered was one of sarcoma, growing probably from the interior of the sacrum, and caused intense pain of a constant character, exaggerated by occasional paroxysms. The tumor eventually grew to an enormous size, filling up the pelvic cavity completely, and the greater part of the abdominal cavity.

The administration of morphine was be-

[1] *Lancet*, Dec. 8, 1888.

gun hypodermically in ordinary doses in January, 1881. The doses were increased gradually during February, March, and April; and at the beginning of May the patient was having nine grains in the twenty-four hours and three injections. By the end of May the injections had to be increased to five in number in the twenty-four hours, and the daily dose was twenty-five grains. By the end of June he was taking thirty-six grains in five injections, and this dose was continued through the month of July, as it controlled the pain fairly well. In August the pain became more severe, and the morphine had to be increased again, and at the end of the month the patient was taking as much as fifty-six to sixty grains per diem, in five injections. Early in September the paroxysms of pain became so severe that chloroform had to be administered in addition to the morphine, and it was found possible to keep the patient fairly comfortable on some days with as little as thirty grains of morphine in the day. Very soon, however, the pain again became more severe, and before the death of the patient, which occurred towards the end of September, the quantity of morphine had to be increased to seventy and even eighty grains daily, the largest single injection given being one of twenty-seven grains.

The strength of the injection given was one grain in six minims, and atropine was given with the morphine throughout, in doses of about $\frac{1}{150}$ grain.

At first there was some constipation, later an occasional dose of castor oil sufficed and when the largest doses of all were being given no aperient of any kind was required. Only one abscess resulted.—*Br. Med. Jour.*, Dec. 8, 1888.

Lovett (R. W.) on the Time and Amount of Ether Required to Produce Anæsthesia.—The author made observations in sixty consecutive operations to throw light upon the above subject. The largest amount of ether required to anæsthetize was four ounces, and that amount was necessary in four of the sixty cases. The small amount was one half ounce, and in seven other instances only one ounce was needed. The average amount used in sixty cases was only two ounces.

The longest time required was 15 minutes. Twice it took 13 minutes, and quite often 10 or 11. The shortest time was 2 to 3 minutes in several patients etherized by force.

In general the attempt was made to etherize the patients without the use of force, and the ether was applied very carefully until the trachea became accustomed to it, and ceased being much irritated by inhaling the vapor, when the cone was placed nearer the nose, until finally the patient inhaled pure ether. In this way twenty-two patients reached complete anæsthesia without the least struggle. In eleven patients the forcible choking method was tried, and the ether was applied in full strength almost at once. In the twenty-two etherizations by the gentle method, the average time required for anæsthesia was 9.3 minutes, while by the forcible method it only took 4.4 minutes. In the same way the average amount of ether used in the gentle method was two and one half ounces, while the forcible method only required one and one half ounces. But although by the forcible method the patient was etherized in less time with less ether, the results were much less satisfactory, for choking and struggling during the operation were much more common than when the gentle method was used. The applica- of the strong ether at once to the trachea seemed to excite a flow of mucous, which continued through the operation, and the patient was at the same time necessarily somewhat asphyxiated by this method in the beginning, and what seemed to be complete anæsthesia proved only too often to be a mixture of anæsthesia and asphyxia, and a few breaths of air would often restore the patient to a violently struggling condition. In general, a patient who was etherized without a struggle almost invariably gave little or no trouble during the operation, however long it lasted, whereas a violent struggle often followed later in the operation by choking, persistent rigidity, and general difficulty of etherization.

As a rule the operations were short ones, and the table shows the time that the etherization lasted, and the average amount of ether consumed during the whole etherization.

Operation lasted: Minutes.	Times.		Oz.
10	7	Av. am't of ether used,	2½
15	7	" "	3½
20	19	" "	3¾
25	7	" "	5
30	10	" "	6

Minutes.	Times.		Oz.
35	4	Am't of ether used,	3ij, 4, 5, and 10
40	1	" "	7
45	2	" "	7.7
60	2	" "	8.8
90	1	" "	14

It will be seen that in general the amount of ether required for each additional five minutes was about one ounce.

In forty-three of the patients the after-effects were carefully noted, and in twenty-eight there was no vomiting either during or after the operation, and no uncomfortable sensations beyond a moderate amount of nausea and dizziness. In eleven more the after-effects were slight; the patient vomited once or twice, but there was no prolonged nausea or vomiting; while in six the after-effects were long-continued, and there was much vomiting. In general, the after-effects were least when the smallest amounts of ether had been inhaled.—*Boston Med. and Surg. Journ.*, Dec. 6, 1888.

Fell (G. E.) on Forced Respiration.—In previous numbers[1] attention has been called to the author's employment of this procedure in the treatment of narcotic poisoning. He now advocates it in cases of drowning and shock.

The method, it will be recalled, consists in producing a rhythmical distension and collapse of the lungs by means of air introduced directly into the trachea through a tracheal tube inserted in the neck, and connected by means of an elastic tube with a pair of bellows or a more complicated respiration apparatus when that is at hand.

In cases of drowning and in shock the author thinks his procedure is particularly likely to save life, although he has not yet tried it. Here there is no poison to antagonize or eliminate as in cases of narcotic poisoning. Such treatment should not of course exclude the employment of other remedial measures, such as the application of external heat and stimuli, and the evacuation of water if present in cases of drowning.—*Med. News*, Dec. 15, 1888.

Gregory (C. L) on Cactus Grandiflorus in Heart Disease.—In valvular disease, where the dilatation has outstripped the compensatory hypertrophy, I have found this remedy more satisfactory than digitalis. In that form of cardiac disease called by Dr. Da Costa "functional valvular disease," cactus is now the only "heart" remedy I use. When there is a fault in the cardiac innervation, the heart's action being tumultuous, irregular, intermittent, feeble, the patient nervous, restless, and dreading some impending danger, the continued use of cactus will almost invariably give permanent relief.

During the past fifteen years I have been using in such cases a tincture of Cactus grandiflorus with the happiest results. I use a tincture made from the fresh plant, giving from one to five drops every two, four, or six hours.

I consider it a heart tonic, pure and simple. By its continued use the nutrition of the heart is improved, and the organ is permanently strengthened. I have not found it disagree with the stomach, even after using it for months at a time.—*Med. News*, Dec. 15, 1888.

Oliver (T.) on Adonidine in the Treatment of Heart Disease.—Adonidine has, in every case that I have given it, relieved all unpleasant symptoms. Every patient who has taken it has expressed himself, after a few days' trial of it, as feeling very much better, and that not in one direction only. The painful throbbing of blood-vessels, headache, and profuse perspirations have, in addition to dyspnœa and præcordial pain, disappeared; and whilst in most of the cases there has been a slight increase in the amount of urine thrown out after treatment, I am inclined to think that adonidine has little diuretic action. It is a cardiac tonic. It acts chiefly upon the heart, gently raising arterial tension; it has something of the sedative action upon the heart that belladonna has. It relieves the sense of increased intra-cardiac pressure; and the cases of aortic regurgitation in which, I think, it answers best are those where the lesion is due either to traumatic rupture of the valve or to chronic aortitis, and where it has not arisen from rheumatic endocarditis.—*Lancet*, Nov. 24, 1888.

Kloman (W. C.) on a New Use for Nitro-Glycerine.—The author was giving a one-per-cent. solution of nitro-glycerine to a man of eighty-two with cardiac asthma. After an exposure to cold, in which he got thoroughly chilled, he took a three-drop dose and soon became thoroughly warm and relieved. The effect was almost instantaneous. The author thinks for these and other physiological reasons that the drug would be of great advantage in cases

[1] MEDICAL ANALECTIC, Dec., 1887, p. 536; Mar. 15, 1888, p. 128.

of threatened senile and other gangrene.—*Maryland Med. Jour.*, Dec. 15, 1888.

Flint (W. H.). Clinical Report on Sulphonal.—The author reports the use of the drug in thirty-three cases. He corroborates previously reported beneficial actions of the drug, and states that the only objectionable after-effect has been a moderate somnolence on the following morning. He testifies to its great utility in cases where opium or other hypnotic drugs have been withdrawn. In four cases where insomnia depended upon the dyspnœa of cardiac or Bright's diseases, it was useless, and recourse was had to morphia. Insomnia with acute pain is never relieved by it, with dull pain occasionally. Insomnia from cough is partly relieved.

The average length of time in producing sleep was one hour, and the average duration of sleep was six hours. He counted it a success in eighty-two per cent. of his cases.—*N. Y. Med. Jour.*, Dec. 15, 1888.

Perceval (M.) on Antipyrin in Laryngismus Stridulus.—On the evening of April 4th I was called to see a child aged eighteen months, with the usual symptoms of dyspnœa, with crowing inspirations, accompanied with convulsions. The treatment I then adopted was an emetic of ipecacuanha, to be followed by sedatives and hot flannels applied to the neck and upper part of the chest. The following morning I received a message saying the child was no better, and that the difficulty of breathing had continued through the night. In the case of pertussis, with more than usual irritable cough, which came under my care a few months previously, antipyrin answered extremely well, and it was the benefits which accrued in this case that suggested to me the same treatment. I gave two-grain doses of antipyrin every hour, with the satisfactory result that the difficulty of breathing ceased and the child fell asleep. The same dose was then given every two hours, and the next day the child was running about well.—*Lancet*, Nov. 17, 1888.

Poisoning from a Local Application Used for Tooth Extraction.—A case is reported in the *Dental Cosmos* of poisoning by cocaine, used for the purpose of extracting a tooth. The symptoms presented were apparently the usual ones, but the unconsciousness lasted five hours. The peculiarity of the case consisted in a pustular rash appearing on the forearms on the following morning, and lasting several days. The method employed for the production of the local anæsthesia was freely swabbing the gums three times in five minutes with a mixture of cocaine hydrochlorate, chloral hydrate, carbolic acid, and water. As far as we can ascertain, no case of rash following the use of cocaine has been brought forward, whereas the Chloral Committee of the Clinical Society (Transactions, vol. xiii.) report both pustular and bulbous rashes as having followed the exhibition of chloral hydrate. It seems therefore probable that the pustules were in this case due to the chloral, and not to the cocaine.—*Lancet*, Dec. 8, 1888.

Parker (J. P.) on the Dihydrobromide of Quinine for Subcutaneous Injections.—The insolubility of quinine salts has done much to prevent their hypodermic use by practitioners. The chemical compound of two molecules of hydrobromic acid and one of the alkaloid quinine is an acid salt soluble in five parts of water at 59° F., and when dissolved in that quantity of water has a sp. gr. of 1056—about the same as that of the blood. The salt is permanent. The author has used it often hypodermically, and has never seen it cause local mischief. He also thinks the bromine element may prevent some of the unpleasant symptoms of cinchonism.—*N. Y. Med. Jour.*, Dec. 15, 1888.

Flint (A.) and Maury (R.) on Creasote in the Treatment of Phthisis Pulmonalis.—The records of ten cases reported show that creasote by the stomach and by inhalation, in cases of solidification without cavities, effects prompt and decided improvement in all phthisical symptoms, with increase in appetite, weight, and strength, even with surroundings much less favorable than would obtain in many cases in private practice.

In cases with small cavities much less improvement is to be looked for, but some benefit may be expected.

In cases with large cavities the treatment seems to have little more than a palliative influence.

The observations recorded are defective as regards the influence of the treatment upon the bacilli. In one case, with large cavities, it was noted that the number of bacilli was diminished. No other examinations for bacilli were made during or after treatment.

No estimate was made of the relative

value of creasote taken into the stomach. As regards the inhalations, it is assumed that the chief benefit was derived from the creasote, the spirit of chloroform and the alcohol rendering this agent more volatile, and soothing the mucous surfaces. The inhaled vapor [1] undoubtedly penetrated by diffusion as far as the air-cells. It is by diffusion that fresh air, anæsthetic vapors, etc., penetrate the lungs, and cases of pneumonokoniosis illustrate the fact that even solid particles may be carried to the pulmonary vesicles.

In a case of irritative cough of several months' standing, with slight bronchitis and emphysema, but no signs of phthisis, which resisted ordinary treatment, three inhalations produced complete relief, and the cough had not reappeared at the end of four weeks.

When given by the mouth three drops of creasote are given three times daily.—*N. Y. Med. Jour.*, Dec. 8, 1888.

MEDICINE AND PATHOLOGY.

Moore (J. W.) on Accidental Rashes in Typhoid Fever.—In his paper the author explained that it was not his intention to allude to the essential rose-spot rash of typhoid fever; or to the more common epiphenomena of the disease connected with the skin, such as *taches bleuâtres*, purpura spots, vibices, and sudamnia, or sweat vesicles; or, lastly, to the co-existence with typhoid fever of other specific diseases showing characteristic eruptions, such as scarlatina, measles, variola, and—above all—typhus. He desired rather to draw the attention to certain other accidental or adventitious appearances of the skin, which are of somewhat rare occurrence and, from a diagnostic point of view, of considerable importance. These are—(1) simple hyperæmia; (2) miliary eruptions; (3) erythematous rashes; and (4) urticaria. Dr. Moore then detailed a series of cases which exemplified the occurrence of these accidental rashes, and summed up as follows:—Not infrequently in the course of typhoid fever, an adventitious eruption occurs, either miliary, urticarious, or erythematous. When this happens, a wrong diagnosis of typhus, measles, or scarlatina respectively may be made, if account is not taken of the absence of the other objective and subjective symptoms of these diseases. The erythematous rash is the most puzzling of all; but the prodromata of scarlet-fever are absent, nor is the typical course of that disease observed. This erythema scarlatiniforme is most likely to show itself at the end of the first, or in the third, week of typhoid fever. In the former case, it probably depends on a reactive inhibition of the vaso-motor system of nerves; in the latter, on septicæmia, or secondary blood-poisoning; or both these causes may be present together. The cases in which this rash appears are often severe; but its development is important rather from a diagnostic than from a prognostic point of view; hence, no special line of treatment is required beyond that already employed for the safe conduct of the patient through the fever.—*Med. Press*, Dec. 5, 1888.

Cure of Goitre.—Dr. Stoker recently showed a case of goitre in which the tumor had disappeared during a course of treatment with the galvano-cautery, applied to the turbinated bones for chromo-hypertrophic rhinitis. He attributed the cure to the reflex irritation of the vaso-motor system by repeated cauterization *via* the fifth nerve. He has a second promising case under treatment.

Mr. Lennox Browne at the same time showed three patients who had suffered from goitre. In two of them he had removed the isthmus, and in the third he had extirpated the isthmus and the right lobe, weighing 7¾ ounces. In all three cases relief of intense dyspnœa had promptly followed.—*Med. Press*, Nov. 28, 1888.

Powell (D.) on High-Tension Pulse with Peripheral Reflux in Albuminuria.—Dr. Douglas Powell, in the course of some clinical remarks upon a typical case of contracted kidney, with characteristic cardio-vascular changes, resulting in cerebral hemorrhage, drew attention to a point with regard to the high-tension pulse of this form of albuminuria which the case before him illustrated very strikingly. On compressing the radial artery with one finger with sufficient force to close the vessel—and it required hard pressure to do this,—and applying a second finger to the vessel an inch further in its course, it was felt to pulsate with great distinctness and rhythmi-

[1] Equal parts of creasote, alcohol, and spirits of chloroform.

cally with the central portion of the vessel. Now, keeping up the pressure with the first finger, and applying the second with just sufficient force to check the pulse wave under it, it could be distinctly felt that the blood wave impinged upon the trunk side of the finger first applied. It was clear, therefore, that in this case the pulse was stopped by the first finger, and a peripheral reflux pulse was felt by the second finger of the observer. This phenomenon threw some light upon "incompressible" high-tension pulse of albuminuria and in some other conditions, suggesting that the vessels were applied to the blood they contained with such a degree of tension that they became almost like rigid tubes; and when the overflow through an artery of a limb was stopped at a given point, the peripheral end of the vessel remained full and received a back impulse through the capillary system or anastomosis short of the capillaries with each systole of the heart.—*Lancet*, Dec, 8, 1888.

Hodgdon (A. L.) on a Case of Insolation in a Four-Year-Old Child, Followed by Recovery.—A child of four was one of the participants in a pic-nic for young people, held during a very hot day in July. When I arrived the child was in a very bad condition, and about to pass into general convulsions; temperature in the neighborhood of 104° F. I secured a wash-tub, had cold water poured in, and placed the child in the water. I did not bring about a reduction in the temperature of the water by degrees, but plunged the child into it immediately, and had water (of the same temperature) poured over the portion of his body which the water in the tub did not cover. The result was excellent, the temperature falling below normal. At this point there was a little tendency to collapse, which I combatted by the use of whiskey. Every thing now progressed favorably; not, however, by the temperature remaining at normal, because the mercury soon ran up again, but the disease was manageable from that time. The temperature becoming elevated again, I used the cold bath and aconite as a means of lowering it, and the results were very good.—*Maryland Med. Jour.*, Dec. 15, 1888.

Casey (J. H. M.) on Fatal Septicæmia Following Extraction of Tooth.—A man of thirty-eight had a right upper molar tooth extracted on Saturday. Weather was chilly and he took cold in the jaw. He called in a homœopathic physician on Tuesday. The patient had a temperature of 101° to 103° during the remainder of the week. I visited him as a friend for the first time on Sunday evening. Pulse, 108; temperature, 103°; tongue, coated, headache, jaw greatly swollen. He had had three chills. I diagnosed suppuration of the parotid gland. These symptoms were worse on Monday. On Tuesday morning the parotid gland had burst on the inside, and from four to six ounces of pus came away.

Quin. sulphatis grs. xxiv. and tr. ferri mur. 3 i. were administered daily, brandy was pushed, and an antiseptic spray used. I advised opening the gland on the outside, but action was not taken until eighteen hours later. Rigors and profuse sweats continued during Tuesday and part of Wednesday. Death occurred Wednesday evening at 8.30.—*Weekly Med. Rev.*, Dec. 1, 1888.

Park (R.) on Pyæmia as a Direct Sequel of Gonorrhœa.—On the 26th of September, 1882, a man of 19, came to me with the following history: About a month previously he had contracted a gonorrhœa of ordinary severity, and after continuing for two weeks the discharge had nearly ceased. A few days after that his knee joints began to swell, and he was treated for some days for gonorrhœal rheumatism, by a physician outside of the hospital, but his symptoms becoming worse and his general condition somewhat alarming, he was sent to the hospital.

On admission his left knee-joint was found very much swollen, fluctuating, the swelling extending up the thigh, but the joint not being very painful. In the right knee considerable pain was complained of and there was some distension, but no such amount of swelling as in the other. His general condition was what is generally spoken of as typhoidal, his evening temperature high without marked remissions. From the above date his typhoid symptoms increased in severity; his left knee enlarged still further, and when tapped with an aspirating needle gave a quantity of cloudy serum, in which, under the microscope, a few pus cells were observed. The decubitus became more and more marked, he was delirious at night, his temperature ranged higher, his tongue became dry and brown, sordes collected on the teeth and

lips, and he steadily sank with more and more marked symptoms of sepsis. The 2d of October it was observed that he had paresis of the right arm and superficial ulcers of both corneæ ; his sphincters were relaxed, and subsultus was noted. He was delirious, and from this condition he gradually sank and died on the 4th of October.

As his septic symptoms became more and more prominent, he made less and less complaint of his painful knees, even their tenderness and sensitiveness on handling largely disappearing. The discharge from which he originally suffered did not reappear, and on admission to the hospital, his general condition being so serious, but little attention was paid to his local trouble. His treatment consisted of the best stimulant and tonic measures which could be instituted, and the only one of his joints which seemed to call for special attention was his left knee, which, as above remarked, was aspirated for the relief of the distension.

A post-mortem examination was made eight hours after death. There were slight evidences of leptomeningitis, and there was acute hydrocephalus internus. There were no thrombi in the sinuses of the brain ; the musculature was pale, and there was but little subcutaneous fat. On opening the chest there was found that which was not discovered during life, a collection of pus in the left sterno-clavicular articulation, with carious erosion of the articular surface of the sternum. This abscess contained half an ounce of pus and detritus, and had burrowed posteriorly into the tissues behind the joint ; in several of the other joints pus was also discovered, and both knees were filled with pus and debris which had burrowed up posteriorly, destroying the synovial membrane, and, working in among the hamstring muscles, had denuded the posterior surfaces of the lower ends of both femurs of their periosteum. The cartilages, however, were but slightly affected, and the joints presented but very little apparent enlargement. The heart substance was very pale, soft and anæmic ; there were adhesions between the right lung and the chest wall ; the lungs were œdematous but in other respects normal ; the spleen was enlarged and much degenerated ; the stomach contained grumous fluid and showed numerous fine disseminated hemorrhages under the mucous membrane. The mesenteric glands were enlarged ; the small intestine was studded with very fine tuberculous nodules, almost miliary in size, and displayed the same minute hemorrhages as did the stomach ; the bladder was normal ; the urethra was a little thickened, but showed no other microscopic traces of recent inflammation. The iliac veins contained no thrombi. The original urethral discharge was not examined for gonococci.

The author has repeatedly found gonococci in the synovial exudations of gonorrhœal rheumatism, but never has he found any distinctive pus cells. He says ; " The gonococcus itself is cultivated with great difficulty, and I have never been able to get a pure culture of it, or one with which I could work with any satisfaction ; but I have time and again made cultures from the pus discharged in cases of gonorrhœa of all degrees of severity, from the freshest to the oldest, without reference to the gonococcus, and have invariably succeeded in finding one or more forms of the common pyogenic bacteria, such as *staphylococcus albus* and *aureus*.

The part played by these organisms in the production of septicæmia and pyæmia is now pretty well understood. We have only to suppose that which we know does in many cases occur—that is, a phlebitis either in the neighborhood of the urethra or the prostatic plexus. Once this phlebitis has been aroused, the circumstances in no wise differ from those attending any case of pyæmia, except so far as concerns the mere accident of location. Minute thrombiform, become infected, and are distributed all over the body, manifesting a peculiar preference for the synovial membranes.

Many observers have noticed cases of peritonitis following gonorrhœa ; as to these, almost all of them have occurred in the female sex, and are easily explained by migration of the specific processes along the tubes to the peritoneum. The cases of endocarditis or of pericarditis are hard to explain ; whether they may be ascribed to the specific gonococcus, or whether they come about after a manner similar to that which I have suggested in the above case, cannot at present be decided. Practically it is found that septic symptoms are very rare when the primary trouble is confined to the anterior urethra ; the farther it extends back, the greater the possible danger—*Jour. of Cut. and Genito-Urinary Diseases*, Dec. 1, 1888.

GENERAL INDEX.

Abdomen, air in suppurative swellings of, 481
Treatment of penetrating wounds of, 65
Abdominal, abscess following enteric fever, 356
pressure, as cause of cardiac degeneration, 300
in hysteria, 253
section, mortality of, 554
Purgation after, 87
viscera in chest, 505, 506
walls, arrested development of, 435
Abortion and syphilis, 302
Abscess, cerebral, with negative symptoms, 572
with suppurating middle ear, 571, 572, 573
discharging biliary calculi, 154
following typhoid fever, 356
Ischio-rectal, 181
Mediastinal, 536
outside tonsil, 450
Perityphlitic, opening into hip-joint, 189
Retro-pharyngeal, 450
Sponge dressing in, 159
Treatment of acute, 51
Vesico-vaginal, 542
Abscesses, cold, 444
connected with bone diseases of children, 131
Deep perirectal, 382
Accident, singular, 304
Acephenetidin as an antipyretic, 157
Acetanilide, 197, 275, 536
Acids in treatment of migraine, 73
Acne, 331
Facial, from chronic rhinitis, 6
Treatment of, 396
Aconitum Fischeri, action of, 220
Acrania, 595
Acromegaly, 232
Adenoma of velum, 35
Adonidine in heart disease, 624
Æsculus glabra in shaking palsy, 27
Æthusa Cynapium poisoning, 412
Agaricine, 427
Air, disinfection of, 335
Expired, toxic properties of, 62
in suppurative swellings of the abdomen, 481
Ala nasi, chancre of, 335
Albuminuria, in diabetes, 411
of pregnancy, 92
Pulse in, 626
Alcohol, effect of, on heart, 575
on the liver, 576
Hereditary influence of, 182
in ophthalmia, 93
locally applied as cause of neuritis, 359
Studies on, 573, 575
Alcoholic, excess, mortality from, 400
heredity, 577
hysteria, 26
paralysis, 576
Alcoholism, in Paris, 574
Strychnia in, 64
Alexander's operation, 557
Allochiria, auditory, 210
Alopecia areata, 528
Alterative medicine in doubtful tumors, 337
Amblyopia, toxic, 120
Ammonia, action of, on cholera germs, 163
muriate in myalgia, 346
Ammonium, chloride in neuralgia, 498
picronitrate in malaria, 110
salicylate in fevers, 95
Amputation, injury no longer a warrant for, 254
Quadruple, 275
Spontaneous, case of, 349
Synchronous triple, 159
through thigh, 25
Amputations, one hundred consecutive, 309
Amussat, nature's operation of, 236
Amyl nitrite, in atropia poisoning, 311
in dyspnœa, 157
in opium poisoning, 314
Amyloid degeneration, experimental, 584
Anæmia, fecal, 12
Anæsthesia, from mixtures of other gases with oxygen, 101
Preservation of reflex activity during, 385
Production of, in grave disease, 285
Time and amount of ether to produce, 623
Anæsthetic, a new, 335
A new local, 161
iodoform, 111
Anæsthetics in detection of insanity, 74
Anencephaly, 594
Aneurism, 49
of aorta perforating pulmonary artery, 512
Treatment of, 437
Angina pectoris from syphilis, 85
Aniline, as cause of acute conjunctivitis, 208
method in phthisis, 182
Ankylosis of skeleton, 538
Antepartum peritonitis, 61
Anthrarobin, 530
Antifebrin, 197, 275
Long-continued use of, 536
Antipyretic, action of digitalis, 530
pills, 5
Pyrodin, a new, 536
Antipyretics, action of, in fever, 384
in pneumonia, harmfulness of, 226
Antipyrin, 149, 190, 383
Effect of, on secretion of milk, 614
Idiosyncrasy with regard to, 399
in asthma, 399
in croup, 625
in diabetes insipidus, 383
in excessive fœtal motion and uterine neuralgia, 201
in gastralgia, 429
in sea-sickness, 296
Peculiar effect of, 266
rashes, 554
Antisepsis in internal urethrotomy, 309
Antiseptic, action, of cocaine, 100
of salicylate of zinc, 499
of silico-fluoride of soda, 296
Iodoform as, 21
midwifery, 179
Nitro-hydrochloric acid as, 87
soap, 396
superstitions, 226
Antiseptics, dangers of, 291
Incompatibility of, 262
Antrum, empyema of, 221, 449
Aorta, aneurism of, perforating pulmonary artery, 512
Deformed valves of, 502
Aphasia in secondary syphilis, 539
Aphemia, 487
Apomorphia in asthma, 399
Apoplexy, retention of urine before, 26
Apyretic action of acephenetidin, 157
Aptyalism or "dry mouth," 568
Argyriasis, 95
Arm, paralysis of, from thrombosis, 503
Arnica Montana, effect of, on circulation, 52
Arrested cerebral develpment, 595
Arsenic, action of bromide of, 613
internally for warts, 58
Arteries, coronary, disease of, 68
Arteritis, obliterative, 102, 204
Artery, axillary, 49
Internal carotid, rupture of, 50
Radial, ulceration of, 476
Arterial tension in albuminuria, 626
in neurasthenia, 250
Articular disease, immobilization in, 608
Asclepias Syriaca in lumbago, 193
Asepsis and antisepsis, 22
Aseptic blood-serum to preserve trephine button, 352
operations, a skin scrub for, 237
Aspergillus, camphophenique in, 404

Asphyxia before freezing in blizzard, 121
Aspiration followed by syncope, 304
Aspirator needle, danger of, 435
Asthma, 596
Antipyrin in, 399
Ataxia, locomotor, confined to arms, 228
Atropia poisoning, 310, 311
Auditory allochiria, 210
Aural discharges, septic infection from, 605

Bacillus, new, gas-forming, 36
of syphilis, 393
Bacteriology of normal uterus, 280
Bacterium, pyogenic, in urinary infection, 505
Baldness, congenital, 254
Balsam Peru, as a surgical dressing, 495
Belladonna, plaster, peculiar effects from, 184
poisoning, 312
Biceps, rupture of, 348
Bichromate of potassium poisoning, 314
Biliary calculi from abscess in right iliac fossa, 154
colic, simulated by intestinal tumor, 168
fistula and pregnancy, 181
Births, plural, 519
Bismuth salicylate, 154
sub-benzoate, as an escharotic, 4
Bladder, antiseptic drainage of, 442
Aspiration of, through urethra, 206
Cocaine in malignant disease of, 64
Coin in, 474
Distended, 543
Effect of rapid evacuation of, 124
Incision into, in laparotomy, 88
Operation for new, 568
Perforating ulcer of, 376
Remedy for irritability of, 88
Removal of growths from, 538
Blood-letting, 53, 469
in pneumonia, 332
in thermic fever, 339
Revival of, 344
Blood, leucocythemia as cancer of, 152
Bodily movements, effect of, on septic absorption, 343
Bone, formation of, in eye, 293
Boracic acid, in gonorrhœa, 28
in leucorrhœa, 367
Boric acid, effects of, 94, 98
Bow-legs, 444
Brachial artery, thrombosis of, 503
Bradycardia, 514, 515
Brain, abscess of, with negative symptoms, 572
Coma in lesions of, 99
Diseases of, 486
Softening of, with empyema, 563
Syphilis of, 503
Breast, cancer of, male, 538, 592
Carcinoma of, 305
Evacuation of abscess of, by natural outlets, 304
Bright's disease, cardiac changes in chronic, 560
Neuro-retinitis of, 92
Bronchocele, phytolacca decandra, 224
Broncho-pneumonia, ice in, 298
Bronchus, watermelon seed in, 566
Bryonia alba, styptic action of, 427
Buckwheat, in diabetes, 532

Cactus grandiflorus in heart-disease, 624.
Cæcal hernia in child, 121
Calcium chloride in glandular affections of the neck, 430
Calculus, preputial, 546
Renal, 158
Vesical, with cotton nucleus, 508
Callus, vicious, of fibula, 474
Calomel, 192
for pitting of small-pox, 58
in pneumonia, 468
Campho-phenique, in aspergillus, 404
Camphorated carbolic acid, 264
Camphor, effect of, on salivary glands, 37
monobromide in nervous disease, 554
Canadol, a new anæsthetic, 335
Cancer, and phosphorus, 268
Contagiousness of, 41
Geographical distribution of, 328
Novel view of, 432
of abdominal viscera, supra-clavicular lymphatics in, 72
Cannabis Indica, 107
Cantharidal eruption, 540
Carbolic acid in enteric fever, 333
Carbonate of lime, action of, 613
Carbon bisulphide poisoning, hysteria in, 605
Carbo-oxygen treatment of consumption, etc., 227
Carbuncle treated by scraping, 190
Carbuncles, treatment of, 529
Carcinoma, of breast, 305
of vagina, 543
Cardiac, changes in chronic Bright's disease, 560
complications in rheumatic fever, 602
failure, 447
neurotics, combination of, 525
polypus, sudden death, 606
Cardiocentesis, 86, 561
Caries, spinal, 443
Castor-oil, bean, poisoning by, 134
Ricin a toxic ferment in, 410
Castration, accidental, 364
Cataract, artificial ripening of, 89
extraction without iridectomy, 92
operation, irrigation in, 89, 91
Zonular, operative treatment of, 91
Cataracts, congenital, 146
Cathartics, saline, in treatment of pleuritic effusion, 531
Catheterization, retrograde, 601
Cattle-horn, laceration of pregnant uterus, 14
Caustics, use of, in nose, 221
Cautery in visceral diseases, 4
Cerebellar, abscess from ear disease, 586
hemorrhage, 423
Cerebral, atrophy in infancy, 594
embolism, 564
from middle-ear, disease, 571, 572, 573
palsies of children, 593
softening with empyema, 563
tumor, removal of, 12
cerebro-spinal meningitis, chloroform in, 613
Cerium oxalate, in dysmenorrhœa, 347
in sea-sickness, 297
in cough, 297
Cervix, amputation of, 9
Laceration of, as a cause of uterine disease, 398
Immediate repair of lacerations of, 587
Chancre, implanted on a gingivitis from phosphorus, 195
Intra-nasal, 35
of ala nasi, 335
of upper eyelid, 493
Peculiar result of, 517
Chancres, extra-genital, 35, 82, 112, 431
Charbon in pregnant woman, 335
Chest, gunshot wounds of, 49, 74
Chest-wall, excision of sarcoma of, 169
Chicken cholera and rabbits, 84
Children, venereal diseases of, 394
Chloral, action of, injected into carotid, 370
ammonium, 277
hydrate in whooping-cough, 299
Chlorate of potash poisoning, 389
Chloroform, and cocaine anæsthesia, 419
as a routine anæsthetic, 622
during sleep, 6
in cerebro-spinal meningitis, 613
Cholera, germs destroyed by ammonia, 163
infantum and the weather, 112
Chorea, etc., 167, 488
in child under three, 82
in rheumatism, 99
Rapidly fatal, 216
Chorion, repair of ruptured, 542
Chromium poisoning, 314
Chromopsy, persistent and intermittent, 93
Circumcision and tuberculosis, 84
Circumscribed œdema, 196
Clavicle, ante-sternal dislocation of, 537
Clavicles, absence of, 237
Club-foot, 425, 549
Morbid anatomy of, 611
Cobalto-nitrite of potassium, 427

Coca, some medicinal uses of, 77
Cocaine, and chloroform anæsthesia, 419
as a diagnostic factor, 58
as an antiseptic, 100
conjunctivitis, 532
Death from, 532
in amputation of penis, 477
in croup, 64
Influence of temperature of body on action of, 328
in malignant disease of bladder, 64
in urethra, epileptiform convulsions from, 418
in vaginismus, 532
New combination of, 64
Codeine or morphine in diabetes, 533
Peculiar effect from, 424, 468
poisoning, 365, 411
Coffee, effect of empyreumatic oil of, 184
Coin in bladder, 474
Coition, hemoptysis in, 336
Cold, abscesses, 444
bathing in fever, 165, 194
in hyperpyrexia of rheumatism, 212
Colectomy for malignant disease, 603
Colon, dilatation of, 148
On failure to find, in colotomy, 309
Colotomy, 507
Failure to find colon in, 309
Coma in brain lesions, 99
in young children, 26
Comedones, treatment of, 12
Conium in rectal pain, 199
Conjunctiva, hemorrhage from, 11
Conjunctivitis, from aniline, 208
from cocaine, 532
Constipation, glycerine enemas in, 23, 110
Infantile, treatment of, 84
Postural treatment of, 448
Consumption, carbo-oxygen treatment in, 227
Contact lenses, 294
Coracoid process, separation of epiphysis of, 434
Cornea, lead deposits on, 403
Sloughing of, from cold, 456
Transplantation of, 454
Ulcers of, from electric light, 93
Corneal ulcers, eserine in, 333
Corrosive sublimate, in puerperal and other septicæmias, 264
in ophthalmia, 93
poisoning, 263
Poisoning from tampon, 207
Value of, as disinfectant, 428
Counter-irritation, new mode of, 497
Cramp, writer's, 487
Craniometry, principles of, 360
Creoline and photoxyline, 429
Creosote in phthisis, 625
Cretinism, sporadic, 72
Croup, antipyrine in, 625
Croup, Cocaine in, 64
Cucumber ointment, 164
Curettement, of uterus, death after, 240
Curette, use of, in uterine fibroids, 397
Curvature, lateral, 444
Spine, 544
Cutaneous, embolism, 564
revulsions, new mode of, 497
Cystitis and gonorrhœa, quinine in, 187
Saccharine in, 316
Cystocele obstructing labor, 220
Cystoscope, prognostic power of, 538
Cystoscopy, 415
Cystotomy for removal of coin, 474

Deafness following mumps, 210
Death, sudden, after urethral injection, 12
Delirium tremens, 249
Ipecac in, 74
Deltoid, separation of, at insertion, 23, 89
Deodorized idoform, 96
Dermatoses following mental shock, 395
Detachment of retina, curability of, 404
Deutsch - Medicinische Schriftsucht, 317
Dexiocardia, rotation of heart in, 561
Diabetes, albuminuria in, 412
Buckwheat in, 532
Codeine or morphine in, 533
insipidus in child, 217
mellitus, lesion of pancreas in, 248
Saccharine in, 130
Skin affections in, 526
Diagnosis, cocaine in, 58
Diaphragm, anomaly of, 547
Ossification of, 48
Ruptured, and abdominal viscera in chest, 505, 506
Diaphragmatic breathing from ankylosis, 538
Diarrhœa, chronic, remedy for, 420
Lead acetate in, 500
Talc in, 370
Digitalis, and pneumonia, 500
as an antipyretic, 530
when to give it, 192
Diphtheria, and veratrum viride, 298
cauterization and removal of membrane, 222
Cyanide of mercury in, 184
Eucalyptus steam in, 467
Hydrogen peroxide in, 95, 114
Local treatment of, 7
Oil of peppermint in, 162
Sulphur in, 163
Diphtheroid throats, 114
Disinfectant action of corrosive sublimate, 429
Disinfection of air, 335
of gynecological instruments, 9
Dislocation of hip of 11 months' standing reduced by manipulation, 474
Disseminated sclerosis, differential diagnosis of, 406
Distraction in hip-disease, 607
Dropsy, strophanthus in cardiac, 254
Drowning, forced respiration in, 624
Drugs, multiplying useless, 616
Drum, disastrous results of artificial, 454
Duboisine, poisoning by, 147
Duodenal ulcer, 341, 603
Dysentery, ipecac per rectum in, 202
Treatment of, 347
Dysmenorrhœa, cerium oxalate in, 346
Dyspnœa, nitrite of amyl in, 157
Quebracho in, 227

Ear, abscess of drum simulating toothache, 210
Affection of, causing melancholia, 210
and cerebellar diseases, 586
and eye, lead lotions in, 119
Bead in, 571
Blow on, with peculiar reflex symptoms, 548
Desquamative inflammation of, 145
Epithelioma of, 209
Foreign bodies in, 454, 455, 456
Inflammation of, 7
Instillation of silver nitrate into, 119
Lactic acid in suppurations of, 209
Maggots in, 97
Middle, erectile tissue in, 401
Suppurations of, as cause of cerebral disease, 571, 572, 573
Polypi of, 11
Syncope from injection of water in, 119, 145
Traumatisms of, 145
troubles, exhaustion and inflation in, 118
Ears, sympathetic affections of, 404
Ecchondrosis of the triangular cartilage, 595
Ectocardia, cure by plastic operation, 305
Ectopia lentis, 211
Eczema, 121, 330
as a nervous disease, 394
Red veil as cure for, 530
Cause of infantile, 330
Elbow, diseases of, 445
joint, loose body removed from, 476
Electric, insolation, 211
light, as cause of ulcers of cornea, 93
Effect of, on eyes, 607

Electricity, in pelvic inflammation, 599
in typhoid fever, 615
Electrolysis in lupus vulgaris, 395
Elephantiasis Arabum, 330
Embolism, cerebral and cutaneous, 564
from fat, 359
Mesenteric, 270
Emphysema, danger from paraldehyde in, 563
with cerebral softening, 563
Empyema of maxillary sinus, nasal symptoms, 221
Endarteritis, a cause of symmetrical gangrene, 117
Pulmonary, 134
Endocarditis, 388
Treatment of, 485
Endometritis, from use of uterine sound, 424
Use of the curette in, 459
Enemata of glycerine in constipation, 23, 110
Enteritis, membranous, 166
Enucleation, section of optic nerve for, 436
Epididymitis, from strain, 504
Traumatic, 491
Epigastrium, enlarged veins in, 153
Epiglottiditis, primary, circumscribed, œdematous, 36
Epiglottis, angioma of, 114
Epilepsy, and migraine, 419
Fifty cases of, 112
from worms, 328
Mortality of, 250
Sensory Jacksonian, 488
Epileptiform convulsions from cocaine in the urethra, 418
Episcleritis, a new method of treating, 327
Epistaxis, genital, 336
Epithelioma in scar of old burn, 435
Erectile tissue in middle ear, 401
Ergot, and iodide in meningitis, 501
in involution of uterus, 108
in obstetrics, 133
in post-partum hemorrhage, 110
in whooping-cough, 290
Ergotinin in hæmoptysis, 75
Eruption from cantharides, 540
Erysipelas, in lupus, 330
Pilocarpus in, 535
Erythrasma, 395
Erythrophlœum, 161
Eserine in corneal ulcers, 333
Ether, as an intoxicant, 400
as cause of uræmia, 96
Time and amount of, to produce anæsthesia, 623
Etherization, bodily temperature in, 265
Eucalyptus steam in diphtheria, 467
Toxic action of, 228
Evulsion of pterygium, 94
Excision of joints, 445
Excretion, relation of, to stimulants and medicines, 417
Exophthalmic goitre, 569
Autopsy in, 268
Fatal case of, 267
Extra-genital chancres, 431
Extra-uterine pregnancy, laparotomy in, 599
Eye, evisceration of, 10
Expulsion of foreign body from, 2
Operations, bromide of potash in, 227
Treatment of suppurative diseases of, 253
Eyes, effect of electric light on, 607

Facial palsy from bullet wound, 496
Fallopian tube, malignant disease of, 252
Fat-embolism in simple fracture, 359
Fecal, accumulation, 83
anæmia, 12
Feces, incontinence of, after operations for fistula, 381
Fecundity, extraordinary, 52
Fever, action of antipyretics in, 384
Cold bathing in, 165
of over-exertion, 62
Sudden accessions of, in children, 361
Typhoid, cold bathing in, 194
complicated by injury to head, 147
Electricity in, 615
Yellow, 541
Fevers, ammonium salicylate in, 95
Fibula, vicious callus of, 474
Filaria Sanguinis hominis, 353
Fire-damp explosions, nervous affections following, 99
Fish, poisoning by, 38, 39
Fistula in ano, rapid cure by primary union, 473
Unusual form of, 377
Urethro-rectal, 379
Vesico-rectal, 538
Flat-foot, treatment of, 442
Flatulence in heart disease, 251
Fluosilicate of soda, 24
Food, sterilization of, 211
Fool's parsley, poisoning by, 412
Foreign bodies, swallowed, 172
Fracture, of first rib, 360
of rib, spontaneous, 507
Fractures, massage in, 237
of upper extremity, 617

Gallstone obstructing intestines, 83
Gallstones, in a girl of fifteen, 517
Vomiting of, 40
Gangrene, following purpura, 47
foudroyante, preventive inoculation of,
Moist heat in senile, 254
Nitro-glycerine in threatened, 624
Pulmonary, 547
Gastralgia, antipyrine in, 429
Gastric, dilatation in surgical procedures, 292
ulcer, treatment of perforation of, 238
Gastrostomy, death on 403d day, 565
Gelsemin in obstetrics and diseases of children, 46
Gelsemium sempervirens, 466
General paralysis, differential diagnosis of, 406
Generations, five living, 253
six living, 253
Genital epistaxis, 336
German medical journal habit, 317
Germicide power of sulphur dioxide, 15
Gingivitis from phosphorus, chancre on, 195
Glandular affections of the neck, calcium chloride in, 430
Glioma of retina, 93
Glycerine as a surgical dressing, 495
enemas in constipation, 23, 110
Goitre, cure of, 626
Exophthalmic, 569
Treatment of, 292
Gonorrhœa, and cystitis, quinine in, 187
Boracic acid in, 28
in female, 588
in young children, 28
of mouth, 550
Pyæmia from, 627
Gonorrhœal, infection, new manifestation of, 9
peritonitis, 355
rheumatism in girl of 9, 517
sterility, 355
Grafts, zoöplastic, 133
Gray oil in syphilis, 395
Gynecological instruments, disinfection of, 9
Gynecology, zinc and iodoform in, 58

Hæmatoma auris in insane who recover, 405
Hæmidrosis and permanganate of potash, 277
Hæmoptysis, ergotinin in, 75
Hairs, nodose, 529
Hallucinations from salicylate of sodium, 163
Hand, antiseptic treatment of wounds of, 385
Hands, deformity of, in glass-blowers, 218
Haya poison, 161
Headache, occipital, 480
Head-drop, 35
Heart, action of alcohol in, 575
action of, in apparent still-birth, 254
Degeneration of, from abdominal pressure, 300
disease, adonidine in, 624
Cactus grandiflorus in, 624
Chronic, 561
Neuroses of, 436

Heart disease, Stomach flatulence in, 251
failure, treatment of, 447
Fibroid and aneurismal disease of, 68
Hydatids of, 73
involved in mediastinal tumor, 205
lesions in kidney affections, 408
Nitro-glycerine in diseases of, 214
Pin imbedded in, 543
Polypus of, sudden death, 606
Rare malformation of, 254
Strophanthus in disease of, 254
Treatment of organic disease of, 509
Valves of, tested with air, 243
Hedwigia, balsamifera, 534
Helleborein, anæsthetic effects of, 534
Hemichorea rheumatica, 99
Hemoptysis, after coition, 336
from foreign body, 100
Hemorrhage, cerebellar, 423
Cerebral, in child of 19 months, 483
Ergot in post-partum, 110
from palm, arrest of, 375
from pharynx and larynx, 498
in myxœdema, 63
Peri-pancreatic, 121
Tonsillar, 113
Umbilical, 171
Hemorrhoids, Whitehead's operation for, 377
Heredity, alcoholic, 577
Hernia, between vertebræ, 327
Cæcal, in child, 121
cured by resection of intestine, 473
Lumbar, in track of spinal abscess, 274
Radical, cure of, 105
Rare case of, 135
Treatment of, 30
Herniotomy in an infant, 49
Herpes zoster, 330, 331
Himrod's powder, poisoning by, 313
Hip disease, distraction in, 607
fixation and traction in, 608
mechanical treatment of, 608
Hip-joint, disease, 125
invaded by psoas abscess, 336
perityphlitic, abscess opening into, 189
Homatropine hydrobromate in ophthalmology, 129
Horse-chestnut poisoning, 122
Hot-air bath and leucomaines and ptomaines, 256
Hutchinson teeth, 8
Hydatids, of heart, 73
Ox-gall in, 278
Hydatid poisoning, 196
Hydrobromate of homatropine, 129
Hydrocele, in women, 59
Radical cure of, 188
Spontaneous subsidence of, 256
Hydrocele, testicle after operation for, 433
Treatment of, 492
Hydrocephalus, 549
Senile, 218
Hydrogen gas by rectum, as test of intestinal perforation, 370, 518
peroxide, as germicide, 469
in diphtheria, 95, 114
Hydrophobia, from monkey bite, 71
Hyposulphites in, 130
Pasteur's treatment of, 194
Treatment of, 501
Hypnotic, action of sulphonal, 229
New, 581
Quinine as, 201
Hypnotics, use of, among the insane, 405
Hyosciamine poisoning, 312
Hyoscine hydrobromate, 110
Hyperemesis, treatment of, 11
Hyperpyrexia in acute rheumatism treated by cold, 212
Hypodermic, injection into a vein, 582
needle, the cause of pneumothorax, 166
solutions, improved container for, 23
treatment of syphilis, 394
Hypospadias in women, 60
Hyposulphites in hydrophobia, 130
Hysteria, abdominal pressure in, 253
Alcoholic, 26
in H_2S poisoning, 605
in the males 494
Hysteriform trismus, 84
Hystero-epilepsy, removal of uterine appendages in, 178

Ice in broncho-pneumonia, 298
Ichthyol in skin diseases, 529, 530
Idiocy due to inherited syphilis, 405
Impregnation, peculiar case of, 375
Incontinence of urine, in children, 136
in women, cure of, 252
Inebriate criminals, punishment of, by death, 579
Inebriates, duty of state to, 578
Inebriety, pathology of, 578
Infection, library books and, 460
Precautions against, 541
Infertility in the male, 350
Insane, self-mutilation of, 480
criminals, 577
Care of, in New York, 407
hypnotics among, 405
Insanity, and syphilis, 404
Detected by laughing-gas, 74
Epileptic, 478
from opium poisoning, 614
in colored race, 406
Recovery from, with hematoma auris, 405
Insolation, electric, 22
in child of 4, 627
Intemperance, connection of, with disease, 575
Intestinal, obstruction, 543, 548
from gallstone, 83
from Meckel's diverticulum, 518
from neoplasm, 133
from round worms, 163
Operative interference in, 1
perforation, recial injection of hydrogen gas in, 370
Intestine, fifteen inches resected in hernia, 473
Perforation of, 355
Suture of, 603
Wounds of, 239
Intestines, complicated operation on, 206
Foreign bodies in, 133
Tumor of, simulating biliary colic, 168
Intubation, 453
in chronic stenosis of larynx, 224
Intussusception with passage of twenty-nine inches of bowel, 205
Iodide and ergot in meningitis, 501
of iron and potassium chlorate, a dangerous mixture, 75
Iodism, 156, 200, 213
Iodoform, anæsthetic, 110
as an antiseptic, 21, 22
Deodorized, 96
in gynecology, 58
in ulceration of alimentary canal, 582
Ipecac, per rectum in dysentery, 202
in delirium tremens, 74
Ipecacuanha, cultivated, 58
spray, 227
Iris, sarcoma of, 269
Iron, effect of, on vital processes, 428
Irrigation, continuous, in the treatment of wounds, 385
Ischio-rectal abscess, 336
Itch, prairie, 331

Jaborandi, as cause of mental disorder, 24
in erysipelas, 535
in obstetrics, 200
Jaundice, epidemic of, 249
Joint-disease, rest in chronic, 609
Joints, excision of, 445

Kidney diseases, heart lesions in, 408
Knee, diseases of, 445
Knee-joint, results of excision after twenty years, 477
Knock-knee, 444
Treatment of, 33

Labor, ischio-rectal abscess with, 181
obstructed by cystocele, 220
Opium in, 23
Spasmodic stricture of urethra after, 242

Labyrinth, necrosis of, with facial paralysis, 572
Lactic acid in suppurations of the ear, 209
Laparo-salpingotomy done in 1784, 59
Laparotomy, 554
for penetrating wounds, 65
in child not an hour old, 49
in extra-uterine pregnancy, 599
scar, menstrual bleeding from, 219
with incision into bladder, 88
Laryngeal abscess, 115
nerves, stimulation of, 598
phthisis, menthol in, 116
Tracheotomy in, 224
tube, improved, 272
Laryngitis, œdematous, 114
Rheumatic, 115
Vocal troubles in, 115
Larynx, angioma of, 222
change from benign into malignant growths, 453
Chronic stenosis of, with intubation, 224
Catheterism of, 115
Cystic tumor of, 453
Fracture of, 223
Hematoma of, 8
Hemorrhage from, 598
Intubation of, 598
Leech attached to, 280
Malignant disease of, 245, 281
Myxoma of, 453
Papillomata of, 222
Paralysis of muscles of, 222
Perichondritis of, 8, 115, 223
Phthisis of, and its connection with tubercle bacilli, 3
Removal, of pin from, 115
of tumor from, 115
Statistics of cancer of, 454
Stenosis of, 598
Syphilitic stenosis of, 115
Tuberculosis of, 8
Lateral, curvature, 444
sinus, thrombosis of, 571
Lathyrus sativus, poisoning by, 411
Lead, acetate in diarrhœa, 500
deposits on the cornea, 403
lotions in the eye and ear, 119
poisoning, peculiar symptoms of, 99
Leech attached to larynx, 280
Legs, comfortable artificial, 442
Lens, displacement of, 211
Leprosy, 329, 527
Leucocytes and microbes, 424
Leucocythemia as a cancer of the blood, 152
Leucomaines and ptomaines, hot-air bath in, 256
Leucorrhœa, boracic acid in, 397
Library books and infection, 460
Lichen ruber planus, 331
Ligature of subclavian artery, 49
Lithemia, treatment of, 103
Lithotomy, and removal of coin, 474
Suprapubic, 363
Liver, abscess of, 272
Treatment of, 250
Action of alcohol on, 576
Gunshot wound of, 234
Resection of left lobe of, 97
Wound of, 362
Lobelia inflata as a surgical dressing, 603
Locomotor ataxia, confined to arms, 228
Differential diagnosis of, 406
Loofah, a vegetable skin scrub, 237
Lumbago, milk-weed in, 193
Lumberman's itch, 331
Lumbar-colotomy, natural, 236
Lung, excavated malignant tumor of, 548
Surgery of, 18
gangrene of, 547
Wound of, 302
Lungs, foreign body in, 100
Lupus, aberrant forms of, 527
Erysipelas in, 330
necrogenicus, 329
vulgaris, electrolysis in, 395

Mackerel poisoning, 38
Maggots, in carious tooth, 302
in the ear, 97
Malaria, and tuberculosis, 432
Mullein in, 582
Picronitrate of ammonia in, 110
Malignant disease, and syphilis combined, 203, 387
Remarkable case of, 67
Male, fern, without dieting, in tape-worm, 430
Infertility in, 350
Malformation, congenital, 378
Malignancy in syphilis, 392
Malingering, 348
Queer case of, 540
Mammæ, entire absence of, 424
Massage, in fractures, 237
in skin diseases, 396
Mastitis, modelling clay in, 352
Maxilla, inferior, fracture of, with fatal putrid infection, 187
Superior, resection for sarcoma, 6
Meckel's diverticulum as cause of intestinal obstruction, 518
Mediastinal, abscess, trephining for, 536
tumor, involving the heart, 205
Sudden death from, 580
Medicine, plea for scientific, 202
Melancholia from an affection of hearing, 210
Meningitis, following tubercular testes, 422
Iodide and ergot in, 501
from bead in ear, 571
with tubercles in uterus, 504
Meningocele, 590
Menstrual, bleeding from laparotomy scar, 219
flow, origin of, 546
Menstruation, precocious, 61
Vicarious, 180
Mental, disorder from jaborandi, 24
shock as cause of purpura, 528
Menthol, in phthisis, 116
in pruritus vulvæ, 370
Mercurialism, sulphur in, 582
Mercury, bichloride of, in pelvic inflammations, 75
Cyanide of, in diphtheria, 184
Danger of subcutaneous use of, 498
Mesenteric embolism, 270
Methylal, 111, 155
in delirium tremens, 155
Microbes, and leucocytes, 424
in the wall, 302
in vegetables, 8
Procedures increasing resistance of organism against, 194
Middle ear, erectile tissue in, 401
Midwifery, antiseptic, 179
Migraine, acids in treatment of, 73
and epilepsy, 419
Milk, effect of antipyrin on secretion of, 614
Secretion of, in non-pregnant women, 458
Milk-weed in lumbago, 193
Modelling clay in mastitis, 352
Moist heat in operations for senile gangrene, 256
Monstrosity, 272
Morphine in diabetes, 533
Large doses of,
poisoning, 314
Tolerance of, in infant, 384
Morphinic and true tetanus, 226
Mouth, gonorrhœa of, 550
Sarcoma of, 222
Mullein in malaria, 582
Mumps, followed by deafness, 210
Muriate of ammonia in myalgia, 346
Murmur, an undescribed arterial, 478
Myalgia, muriate of ammonia in, 346
Mydriatics, use of, 210
Myxœdema, hemorrhage in, 63
Recovery from, 13
Report on, 300

Nasal, and pharyngeal inflammation, 7
chancre, 35
discharges, septic infection from, 605
septum, cause of deflections of, 6, 113
stenosis, 595
symptoms in empyema of antrum, 221
Negro, insanity in, 406
Nephritis, experimental, 70
Scarlatinal, 355
Increase of, 421
Nephro-lithotomy, wound of diaphragm, 98
Nerve-stretching, fatal case of, 362
Nerve, transplanted from rabbit to man, 352
Nerves, rapid return of sensibility after suture of, 206

Nervous, accidents, following fire-damp explosions, 99
condition, a peculiar, 603
symptoms from pelvic disease, 173
Neuralgia, cause and treatment of, 37
Neurasthenia, 340
Arterial tension in, 250
Neuritis, 49
from direct contact with alcohol, 359
Neuroses of heart disease, 436
Reflex, 521
Neurosis allied to chorea, 309
Neurotics, combination of cardiac, 535
Neuro-retinitis of Bright's disease, 92
Nickel, action of, 57
Nipples, sore, a receipt for, 52
Nitric acid in pertussis, 290
Nitro-glycerine in cardiac diseases, 214
in heart-failure, 295
in threatened gangrene, 624
in tinnitus aurium, 63
Tolerance of, 417
Nitro-hydrochloric acid as antiseptic, 87
Nitrous oxide gas in detection of insanity, 74
Nodose hairs, 528
Nose, bony occlusion of, 585
Use of caustics in, 231
Nurses, trained, 169

Obstetrics, gelsemin in, 46
Jaborandi in, 200
Obstruction, intestinal, from an ileo-cæcal growth, 133
from gallstone, 83
Operative interference in, 1
Ocular, symptoms in spinal diseases, 294
troubles in tabes dorsalis, 360
Œdema, circumscribed, 196
cutis, acute, circumscribed, 528
glottidis, intubation for, 453
Œsophagus, deficient, 536
Oil of wintergreen, poisoning by, 38
Olecranon, fracture of, 434
Opium, effect of, on unborn child, 289
habit, and infant mortality, 45
Cause and prevention of, 615
in labor, 23
poisoning, 314
Forced respiration in, 129
Insanity from, 614
versus quinine, 24
Ophthalmia neonatorum, treated by alcohol and corrosive sublimate, 93
Orchi-epididymitis from strain, 504
Orchitis and epididymitis, 491
Osseous formation within the eye, 293
Ossification of diaphragm, 148
Osteoclasis in deformities, 34
Osteotomy in rickets, 33, 34
Otitis media and cerebellar abscess, 586
Ovarian tumor, and pregnancy, 276
in child of 7, 252
Ovaries, absent, 604
Ovariotomy, catharsis after, 274
followed by typhoid fever, 276
in child of 8, 520
in woman of 82, 251
in woman of 79, 178
urticaria diffusa after, 395
Ovary, malignant disease of, 252
Oxalate of cerium in dysmenorrhœa, 346
in cough, 297
in seasickness, 297
Ox-gall in hydatids, 278
Oxygen and carbon in consumption, 552
in scarlet-fever, 562
with other gases as anæsthetic, 101
Oxytoxic action of quinine, 6
Ozæna, tracheal, 336

Pachymengitis hemorrhagica, 567
Paget's disease of the scrotum, 602
Pain, in pelvic disease, 178
Rectal, conium in, 199
Palate, adenoma of, 35
Adherent soft, 597
adherent to pharynx, 114
Cleft, 451
Soft, two rare growths of, 451
Palmar arch, shot-bag pressure in wounds of, 327
Palsy, shaking, 27
Pancreas, cancer of head of, 205
Lesions of, in diabetes mellitus, 248
Traumatic cyst of, 187
Pancreatic hemorrhage, 121
Paraldehyde, danger of, in chronic emphysema, 563
in vomiting, 346
Paralysis, agitans, 27
and pregnancy, alternating, 361
Alcoholic, 576
Early facial, in syphilis, 472
Facial, with necroses of labyrinth, 574
Paranoia, 408
Paresis, pulmonary, 27
Parotid fistula, congenital, 253
Pathological hybridity of osseous affections of parasitic origin, 430
Paupers and criminals, breeding of, 478
Pediculosis, 331
Pelvic, disease, pain in, 178
inflammations, bichloride of mercury in, 75
inflammation, vaginal tampon in, 396
Pemphigus, 331
Penis, amputation of, under cocaine, 477
Loss of, 556
Lymphangitis of, followed by suppuration, 196
Peppermint, oil of, as an antiseptic, 162
water in pruritus pudendi, 214
Perforating ulcer of stomach, treatment of, 238
Pericarditis, purulent, 471
Perichondritis of larynx, 223
Perinæorrhaphy, immediate, 456
Perineum, delivery through, 387
Immediate repair of lacerations of, 588
Lacerations of, 242
Peritoneal, transfusion and the immunity it confers, 602
Peritonitis, ante partum, 61
from intestinal perforation, 355
from use of uterine sound, 427
Gonorrhœal, 355
Perforation from round worms, 482
Pilocarpin in, 399
Purgatives in, 273, 274
Purulent, in infant of 13 days, 483
Tubercular, 517
without fever, 168
Peritoneum, dangers of toilette of, 474
Perityphlitic abscess opening into hip-joint, 189
Perityphlitis, 413
Permanganate of potash, in hæmidrosis, 277
in snake bite, 265
Peroxide of hydrogen as germicide, 469
Pertussis, recent view of, 327
Peru, balsam of, as a surgical dressing, 495
Pessary, improved, 62
Petrous bone, bullet wound of, 496
Pharyngeal and nasal inflammation, 7
Pharyngitis, hemorrhagic, 451
Pharyngotomy, lateral, 7
Pharynx, hemorrhage from, 598
Phenacetin in pyrexia, 157, 277
Phosphorus, and cancer, 268
gingivitis, followed by chancre, 195
Photoxyline and creoline, 429
Phthisis, aniline method in, 182, 201
Cause and curability of, 165
Creosote in, 625
Diagnosis of, by microscope, 358
Hot air inhalations in, 499
Laryngeal, 3
Menthol in, 116
modified by syphilis, 433
of larynx, tracheotomy in, 224
Oil of peppermint in, 162
Phytolacca decandra in bronchocele, 224
Picronitrate of ammonia in malaria, 110
Pilocarpin in peritonitis, 399
Pilocarpus in erysipelas, 535
Pin, suicide by, 134
Pityriasis versicolor, 120
Placenta prævia, partial, 254
Treatment of, 14

Plaster of Paris as a means of spinal support, 611
Pleurisy, and phthisis, 303
Salol, etc., in, 429
Pleuritic effusion treated by saline cathartics, 529
Pleuro-pneumonia, pathological anatomy of, 195
Pneumonia, and digitalis, 500
Blood-letting in, 332
Calomel in, 468
Harm from antipyretics in, 226, 231
in children, 231
Past and present mortality from, 185
Three cases of double, 217
Veratrum in, 192
with prolonged high temperature, 493
Pneumothorax, from hypodermic needle, 166
Tubercular, treated by aspiration and injection of sterilized air, 249
Poisoning, belladonna, 312
Bichromate of potassium, 314
by atropia, 310, 311
by belladonna plaster, 184
by castor beans, 134
by corrosive sublimate tampon, 207
by fool's parsley, 412
by Himrod's powder, 313
by horse-chestnut rind, 122
by hydatid fluid, 196
by lathyrus sativus, 411
by skunk bite, 39
Chlorate of potash, 389
Cocaine, 365, 412
Corrosive sublimate, 263
Duboisine, 147
Eucalyptus, 228
Fish, 38, 39
from local application to gums, 625
Hyoscyamin, 312
Morphine, 314
Oil of tansy, 122
Oil of wintergreen, 38
Opium, 314
Forced respiration in, 128, 624
Insanity from, 614
Potassium chlorate, 122, 291
Stramonium, 312
Polypus, mucous, in child, 113
Posterior nares, bony occlusion of, 585
Post-mortem, remarkable, 505
Post-partum hemorrhage, ergot in, 110
Potassium, bichromate poisoning, 314
bromide in eye operations, 227
in tetanus, 96
chlorate and iodide of iron a dangerous mixture, 75
cobalto nitrite of, 427
poisoning, 122, 291
iodide in non-specific surgical ailments, 207
Pott's disease, 443
Mechanical treatment of, 610
Treatment of, 610
Precocious puberty, with tumor of ovary, 252
Pregnancy, albuminuria of, 92
and biliary fistula, 181
and paralysis alternating, 361
and surgery, 505
Extra-uterine, 257, 457
Ovarian tumor in, 276
Twin, incomplete abortion in, 14
Vomiting of, 555
with unruptured hymen, 387
Preputial calculus, 546
Priapism, continued after coitus, 169
Pruritus pudendi, peppermint water in, 214
vulvæ, menthol in, 360
Prairie itch, 331
Pterygium, evulsion in, 94
Operation for, 294
Ptomaines and leucomaines, hot-air bath in, 256
Psoitis, suppurative, 336
Puerperal, convulsions, veratrum viride in, 164
rheumatism, 546
ulcer of stomach, 545
Pulmonary artery perforated by aneurism of aorta, 512
endarteritis, 134
gangrene, surgery of, 547
paresis, 27
surgery, 18
thrombi, 272
tuberculosis, therapy of, 346
Pulse in albuminuria, 626
Purgation, after abdominal section, 87
Purgatives in peritonitis, 273, 274
Purpura, after ingestion of coal oil, 395
after mental shock, 528
followed by gangrene, 47
Pyæmia from gonorrhœa, 627
Pyogenic bacterium in urinary infection, 505
Pyrexia, phenacetin in, 277
Pyrodin, a new antipyretic, 536

Quebracho in dyspnœa, 227
Quinine, as a hypnotic, 201
as oxytoxic, 6
Dihydrobromide of, 625
460 grains of, in 24 hours, 75
injections in gonorrhœa and cystitis, 187
Remarkable effects of, 163
Subcutaneous use of, 625
vs. opium, 24

Rabbits and chicken cholera, 84
Rachitis, 34, 444
Raynaud's disease, 17, 117
Rectal, pain, conium in, 199
surgery, antiseptics in, 380
Recto-vesical fistula, 538
Rectum, foreign bodies in, 379
Rectum, insertion of ureters into, 172
97 ounces of foreign bodies in, 98
Cancer of, operation for, 378
Rupture of, 380, 381
Reflex, activity, preservation of, under complete anæsthesia, 385
neurosis, 521
Renal disease, heart lesions in, 408
Resection of optic nerve for enucleation, 436
Respiration, forced, 624
in opium poisoning, 128
Rest in chronic joint-disease, 609
Retina, curability of detached, 404
Detachment of, 92
Glioma of, 93
Revulsion, new mode of, 497
Rheumatic fever, cardiac complications in, 602
Rheumatism, acute, in an infant, 315
Gonorrhœal, in girl of nine, 517
Hyperpyrexia of, treated by cold, 212
in nursing infant, 471
Puerperal, 546
Rhinitis, chronic, as a cause of acne, 6
Rib, first, fracture of, alone, 350
Spontaneous fracture of, 507
Rice-grains, tubercular nature of, 606
Ricin, 410
Rickets, and syphilis, 388
in Brazil, 34
Cause and treatment of, 34
Osteotomy in, 33
Rotary lateral curvature of spine, 611
Rupture, internal carotid artery, 50
of biceps, 348

Saccharine, as preservative of urine in chronic cystitis, 316
in diabetes, 130
Salicin in tetanus, 96
Salicylate, of ammonium in fevers, 95
of bismuth, 154
of sodium, as cause of hallucinations, 163
in tonsillitis, 201
of zinc as an antiseptic, 499
Salicylic acid in gangrenous wounds, 531
Saliva, streptococcus in normal, 433
Suppression of, 64
Salivary glands, effect of camphor on, 37
Salol and salicylate of soda in pleurisy, 429
Salpingitis from use of sound, 424
Sarcoma, of the iris, 269
of mouth, 222
of spine, 421
of vagina in childhood, 546
Scarlatinal nephritis, 355
Scarlet-fever, oxygen in, 562

Sciatica, sulphur in, 345
Scoliosiometry in lateral curvature, 611
Scrotum, Paget's disease of, 602
Sea-sickness, an experimental study of 478
Antipyrin in, 296
Oxalate of cerium in, 297
Sedatives, unusual susceptibility to, 534
Septic, absorption, effect of bodily movements on, 343
infection from nasal and aural discharges, 605
surgery, 308
Septicæmia, corrosive sublimate in, 264
from tooth extraction, fatal, 627
of mammary origin, 545
Septum nasi, deflections of, 113
Shock, 507
Forced respiration in, 624
Shot-bag pressure in wounds of palmar arch, 327
Signal service and physician, 548
Silico-fluoride of soda as antiseptic, 296
Silkworm-gut sutures boiled, 614
Silver, nitrate instilled into the ear, 119
tracheotomy tubes, unsuitableness of, 229
Skin, affections in diabetes, 526
diseases, due to defective alimentation, 527
Massage in, 396
Infarctions of, 564
Treatment of vegetable parasitic diseases of, 529
Skull, partial perforation of, by cerebral tumors, 37
Skunk bite, poisoning by, 39
Slag, powdered as absorbent and deodorizer for fæcal matter, 385
Sleeplessness, 489
Treatment of, 421
Slow surgery, 159
Smallpox, prevention of pitting in, 58
Smoker's vertigo, 228
Snake bite, permanganate of potash in, 265
Treatment of, 418
Soap, new antiseptic, 396
Sodium, fluo-silicate, 24
salicylate, as cause of hallucinations, 163
in tonsillitis, 450
Sore-throat, gouty, 450
Sound, uterine, death from use of, 424
Specific sores, peculiar effect of, 550
peculiar result of, 517
Sphygmograph, Edward's, 410
Spina bifida, cervical and sacral, 181
hydrocephalus and club-foot, 549
Spinal, abscess followed by hernia, 274
cord, excision of tumor of, 86
diseases, ocular symptoms in, 294
irritation, treatment of, 131
support, plaster of Paris as, 611
Spine, bullet wound of, 131
Curvature of, with changes in neck, 544
Diseases of, 131
Fracture of, 442
fracture, dislocation of, 442
Lateral curvature of, 31, 32
Method of recording lateral curvature of, 611
Rotary lateral curvature of, 611
Sarcoma of, 421
Trephining of, to relieve pressure from caries, 386
Spleen, movable, with twisted pedicle, 218
Opening and drainage of suppurating, 170
Splint dressing, non-expensive, 105
Sponge-dressing in abscess, 159
Spontaneous amputation, 349
Sputum, examination of, 387
Squint, treatment of, 94
Stenosis of larynx, 598
Sterility, importance of microscope in treatment of, 590
from gonorrhœa, 355
Sterilization of infants' food, 211
Sternum, dislocation of, 234
Fracture of, 233, 364
Trephining, in mediastinal abscess, 536
Still-birth, action of heart in, 254
Still-births, vaso-renal changes as cause of, 431
Stimulants and excretion, 417
Stomach, dilatation of, in surgical relations, 292
Puerperal ulcer of, 545
Rupture of, 36
Stone in, 136
Stone in stomach, 136
Stramonium poisoning, 312
Streptococcus in normal saliva, 433
Stricture of urethra, spasmodic, after labor, 242
Strophanthus, 137
in cardiac dropsy, 254
in tetanus, 384
Strychnia as hypnotic, 46
in alcoholism, 64
Styptic action of bryonia alba, 427
Sublimate solutions, acidified, 9
Sudden death in pulmonary tuberculosis, 166
Sugar, test for, 135
Suicide by pin, 134
Novel, 86
Sulphonal, 581
a new hypnotic, 229
Clinical report on, 625
Sulphur, dioxide, germicidal power of, 15
in diphtheria, 163
in mercurialism, 582
Sulphur, in sciatic neuralgia, 345
Sulphurous acid and whooping-cough, 418
Sunstroke, blood-letting in, 339
in child of four, 627
Supra-renal capsules, hemorrhage in, 583
Surgery, and pregnancy, 505
Septic, 308
Sutures of boiled silk-worm gut, 614
Sycosis parasitica, 529
Symmetrical gangrene and sclerodema, 117
Syncope, after aspiration, 304
from syringing the ear, 119, 145
Nitro-glycerine in, 295
Syphilis, and abortion, 302
and idiocy, 405
and insanity, 404
and malignant disease combined, 203, 337
and rickets, 388
in Brazil, 34
and tuberculosis among North American Indians, 529
Aphasia in secondary, 539
Bacillus in, 393
Cerebral, 503
Contagiousness of, 393
Early facial paralysis in, 472
Epidemic of, from a nurse, 4
from striking a blow, 604
Gray oil in, 394
in women, 3
Inherited, 393
Malignancy in, 392
modifying phthisis, 433
Peculiar case of, 335
Preventative treatment of, 393
Primary, of upper eyelid, 493
Problems in, 393
treated by hypodermics, 394
Ulcerosa cutanea, 393
Unusual case of, 483
Wholesale dissemination of, 472
Syphilitic, angina pectoris, 85
gumma of trachea, 116
infection, damages for, 539
stenosis of larynx, 115
Tabes dorsalis, differential diagnosis of, 406
Ocular troubles in, 360
Urine in, 344
Tachycardia, cause of case of, 28
Talc in diarrhœa, 370
Talipes, equino-varus, anatomy of congenital, 611
Tampon, twenty-nine years in vagina, 51
Tannin in tubercular disease, 200
Tansy, poisoning by oil of, 122
Tape-worm treated without dieting, 430
Tattoo marks, mode of removing, 519
Temperature, in etherization, 265
Sudden high, in children, 361
Tendon reflex, values of, 488
Tension in surgery, 349
Terebene, use of, 553

Testicle, condition of, after obliteration of tunica vaginalis, 433
Displacement of, 491
Diseases of, 491
Testes tubercular, followed by meningitis, 422
Testis, tubercle of, 489, 491
Tetanus, experimental, 432
Infectious nature of, 583
Morphinic and true, 226
Recovery from, 347
Recovery from traumatic, 566
Strophanthus in, 384
treated by salicin and KBr, 96
Therapeutic literature, serious defect in, 22
Thermic fever, blood-letting in, 339
Thermo-cautery in visceral diseases, 4
Thiersch's method of skin-grafting, 107
Thigh, amputation through, 25
Thoracic wall, excision of sarcoma of, 169
Thrombosis, pulmonary, 272
Thymus vulgaris in whooping-cough, 156
Thyroid, enlargement of, in child, 116
Tinnitus aurium, compression of vertebrals in pulsating, 145
Objective, 293
Nitro-glycerine in, 63
Toe, stiffness of, in male adolescents, 29
Tolerance of foreign bodies in tissues, 591
Tongue, appearance of, in disease, 222
Epithelioma of, 452
Hypertrophy of base of, 114
Removal of half of, 7
Resection of, 452
Sarcoma of, 453
Tubercular ulcer and psoriasis of, 596
Total excision of, 113
Tonsil, fatal hemorrhage from, 113
Removal of sarcoma of, by external incision, 222
Tumor of, 7
Tonsillitis and tonsillotomy, 596
Salicylate of sodium in, 201, 450
Tonsils, functions of, 597
Tooth, carious, maggots in, 302
Trachea, gumma of, 116
Tracheal ozæna, 336
Tracheotomy in laryngeal phthisis, 224
Preventing granulations after, 116
tubes, unsuitableness of silver for, 229
without canula, 453
Transfusion, a substitute for, 493
Successful case of, 310
Trephine button preserved in blood serum, 352
Trichiasis, operation for, 403
Trichorexis nodosa, 331
Trismus, hysteriform, 84
Tubercular, nature of synovial rice-grains, 606
peritonitis, 516
versus typhoid fever, 299
testes followed by meningitis, 422
Tubercle in uterus, 504
of testis, 489, 491
Tuberculosis, and malaria, 432
and syphilis in N. A. Indians, 528
cutis verrucosa, 395
from circumcision, 84
germ in river water, 432
of the larynx, 8
Sudden death in pulmonary, 166
Tannin in, 200
Therapy of, 346
Tumor, mediastinal, involving the heart, 205
of mediastinum, 580
Tumors, doubtful, alterative medicine in, 337
Turpentine, action of oil of, 15
Application of oil of, to recent wounds, 129
Twins, one black and one white, 52
Language of, 62
Tympanophony, 293
Typhoid fever, accidental rashes in,
after ovariotomy, 275
Carbolic acid in, 333
Cold bathing in, 194
complicated by injury to head, 148
Digitalis in, 530
followed by abscess, 356
in child of three, 199
Innoculation against, 194
versus tubercular peritonitis, 299

Ulcer, of duodenum, 341
of leg, chronic, 565
of stomach, puerperal, 545
Perforating, gastric treatment of, 238
Ulcers, corneal, eserine in, 333
treated by transplantation of large pieces of skin, 106
Ulceration of alimentary canal, iodoform in, 582
Uræmic, 355
Umbilical, hemorrhage, 171
sinus, 357
Upper-air passage, treatment of, 584
Upper extremity, fractures of, 617
Urachal fistula, 356
Uræmia from ether, 96
Uræmic ulceration, 355
Uranium salts, action of, 494
Ureters, insertion of, into rectum, 172
Urethra, passage of gas and fæces through, 507
Spasmodic stricture of, after labor, 242
Urethrocele, cause and treatment of, 601
Urethrotomy, antisepsis in, 309
Urinary infection, pyogenic bacterium in, 505
Urine, cure of incontinence of, in women, 252
in tabes, 346
incontinence of, in children, 136
Preservation of, 339
Retention of, 508
Retention of, before apoplexy, 26
Saccharine as preservative of, 316
Suppression of, 158
Urticaria, diffusa after ovariotomy, 395
pigmentosa, 330
Uterine, appendages, removed for hystero-epilepsy, 179
removed for pain, 178
disease, influence of cervical laceration in, 398
displacements, operations for, 458
fibroids, curette in, 397
neuralgia, anti-pyrine in, 201
Uterus, absent, 604
and appendages, nervous symptoms from diseases of, 173
and vagina, total absence of, 278
Bacteriology of normal, 280
Death after curettement of, 240
Ergot in involution of, 108
Laceration of pregnant, 14
Ligature of, for displacement, 556
Tubercle in, 504

Vagina, absence of, 278
and uterus, absence of, 278
Occluded, 272, 279
Primary carcinoma of, 543
Rare tumor of, 542
Sarcoma of, in childhood, 546
uterus, and ovaries absent, 604
Vaginal tampon in pelvic inflammation, 396
Vaginismus, cocaine in, 532
Valves of heart, alteration of, 503
tested with air, 243
Varices in nerves as cause of pain, 100
Varicocele, in the female, 459
Treatment of, 491
Vaso-renal changes as cause of still-births, 431
Vegetables, penetration of microbes into, 8
Vein, puncture of, in hypodermic medication, 582
Veins, enlarged, in epigastrium, 153
Velum palati, adenoma of, 35
Venereal diseases in girls of tender age, 123
Venesectio ad ℥ xvj, 469
Venesection, revival of, 344
Veratrum, in pneumonia, 192

Veratrum, viride, 333
in diphtheria, 298
in puerperal convulsions, 165
Version in labor obstructed by cystocele, 220
Vertebræ, hernia between, 327
Vertebral caries, pathology and treatment of, 443
Vertebrals, compression of, in tinnitus aurium, 145
Vertigo, smoker's, 228
Vesical, calculus with cotton nucleus, 508
irritability, remedy for, 88
Vesico-rectal fistula, 538
Vesico-vaginal, abscess, 542
fistula, operation for, 375
Vest-pocket anatomist, 616
Vicarious menstruation, 180
Vitiligo, 528
Vitreous, artificial, introduction of, 10
Vomiting, of pregnancy, 555
Paraldehyde in, 346
Vulva and vagina, atresia of, 456

Warts treated by arsenic internally, 58
Water, absorption of, by colon, 55
Watermelon, seed in right bronchus, 566
seeds obstructing bowels, 548
Wharton's duct, foreign body in, 113
Whooping-cough, nitric acid, ergot, and chloral hydrate in, 290
Recent views of, 327
Sulphurous acid in, 418
Thymus vulgarus in, 156
Wintergreen, poisoning by oil of, 38
Women, syphilis in, 3
Worms, obstructing intestines, 153
Epilepsy from, 328
Peculiar case of, 548
Wounds, of hand, antiseptic treatment of, 385
treated by continued irrigation 385
Writer's cramp, 487

Xeroderma pigmentosum, 215

Yellow-fever, 541
Treatment of, 461

Zinc, oleate of, in gynecology, 58
Salicylate of, as antiseptic, 499
Zoöplastic grafts, 133
Zygoma, fracture of, 236

3 gal
259